14 May 2021

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The J.P. Morgan View

Pop go the bubblets

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- Cross-asset strategy: Bond yields have risen much less in May than in Q1, but some markets have stumbled nonetheless (Equities) and others had approached bear market territory (innovation/clean energy stocks, SPACs, traditional IPOs, some Cryptos) as an inflation surge creates unease about global liquidity and asset valuations. Inflation is accelerating more quickly than anyone imagined but so are growth and corporate earnings, which is why we aren't concerned about Equities, Credit and Commodities at the index level. There are problems with risk premia being too low in Bonds, which will create recurring and moderate vol shocks this year, but the level of rates should remain low enough to sustain high valuations in major markets. The bubble term implying a lack of sustainability applies better at the sub-asset class and new asset class level, none of which we recommend owning.
- New trades: Bought Equity vs Credit volatility (<u>Doctor</u>); highlighted new trades in single-name Euro Credit (<u>Davies</u>); bought DAX and SX5E dispersion (<u>Silvestrini</u>); offered single-name stock ideas to position for a spike in Oil (<u>Quigg</u>); sold FX vol on USD/RUB but bought vol on GBP/CAD (<u>Ravagli</u>).
- Must-read reports: ESG in 2021: Going faster, deeper, broader (Chang); Keep it simple: Inflation is a policy choice (Kasman & Lupton); Are we done with the global savings glut? (Aziz & Feroli); The DM macropru experiment: an update (Barr & Jarman); The impact of COVID-19 on US mortality risk (Mackie).
- Economics: This week's <u>US CPI</u> release was stronger than even the most bullish Wall Street forecaster (3% on core vs consensus 2.3% and high estimate of 2.5%), but the print doesn't resolve the question of a persistent overshoot. That view rests on a judgement of how quickly the supply side normalizes in pandemic-impacted areas like <u>semiconductors</u>, travel and lodging. Our economists still expect US core to moderate to 2.2% by year-end. This report is unlikely to induce the Fed to start talking about tapering at its June meeting, unless the next <u>payrolls</u> report is very strong and comes with significant revisions. We still expect tapering to begin in early 2022 (see <u>Daily Economic Briefing</u>). The big medium-term call is that DM central banks will succeed in lifting core above 2% for the first time in 25 years, sometime between 2023-24 (see Kasman & Lupton's <u>Keep it simple: Inflation is a policy choice</u>).
- **Equities**: Earnings have been exceptional in US and Europe (EPS 20% ab above expectations), but market reaction has been subdued due to valuations (Matejka).
- **Bonds**: In the US, keep carry efficient 3s/7s UST curve steepeners. In the Euro area, maintain some medium-term bearish exposure in options.
- Credit: We uncover Private Credit. We look at size, risk and its relationship to and footprint in public capital markets (<u>Dulake</u>).
- Currencies: We keep a small set of core USD longs but also remain long DM petro FX as a reflation play and inflation hedge. JPY is our primary funder.
- Commodities: As cost inflation risks underpin longer-term energy price, demand strength supports near-term price premium (<u>Kaneva</u>).
- Catalysts next week: Fed speak (all-week); China IP/FAI/retail sales (May 17th); FOMC minutes (May 19th); SARB (May 20th); flash PMIs (May 21st).
- J.P. Morgan View video (Normand & Lupton): click here to watch.
- Even though this month's rise in global bond yields has been much smaller and lower-volatility than those in Q1, some risky markets have stumbled while others collapsed. From their April lows, US 10Y rates are up only 15bp but inflation breakevens are about 20bp higher, resulting in an atypical drop in real yields as the economy booms. (Global QE is suppressing nominals, lifting inflation expectations and containing real yields, just as in 2013 before the tantrum). From their April/May peaks, global equities are down only 2-3%,



Cross-Asset Strategy

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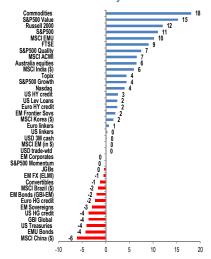
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Chart 1: 2021 returns by market & factor



Source: J.P. Morgan

See page 11 for analyst certification and important disclosures, including non-US analyst disclosures.

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but some indices like the Nasdaq, Nikkei and MSCI EM Asia are down by twice as much. Post-pandemic must-haves like innovation stocks, clean energy equities, SPACs, traditional IPO stocks and Cryptocurrencies were down 15-25% from their 2021 highs, so had approached bear market territory (chart 2). Commodities have stalled, but their high level has allowed EM Currencies as a bloc to remain relatively stable in an environment of rising volatility that usually triggers USD strength. Value has resumed its rise versus Growth, but mainly on a style basis rather than on a regional one (EMU is beating the US, but Japan and EM are not).

- All of these moves are consistent with a chain reaction that occurs when markets are expensive, and inflation runs hot enough to question the monetary policy that has been supporting them (charts 3 and 4). But the ecosystem connecting the economy, markets and the Fed isn't a nuclear power plant destined for meltdown. Instead, there are limits to how far a process can run even once it starts, as a function of valuations, positions, the state of the economy and policy decisions. Hence why even though we failed to call this inflection point – our cross-asset complacency model has been flashing since February, which was too soon to call a correction without a clear catalyst – we are still minded to frame these moves as intra-month and moderate drawdown within the longerterm paths of higher equities, stable credit spreads and rising commodity prices. The EM path swerves more and is quite country-specific, depending on EM economies' progress with vaccinations and rate hikes this year (we expect hikes from Brazil, Russia and now Mexico). Below is a summary of the working assumptions informing this view, many of which are detailed in the March 15th report, *A guide to cross-asset investing as the* US pursues overheating: Answers to 12 questions on inflation cycles, bond bear markets, contagion and hedging.
- 1) Inflation's path involves a surge (Q2/Q3 2021), a moderation (Q4), then a higher but not very high run rate thereafter (2023-24). Our economists have always expected global core inflation to move erratically over the near and medium term, which for Strategy, means damage to Bonds than to other markets. The US forecasts are the ones that matter for global liquidity, and show core PCE running at about 2.4% this spring and summer due to bottlenecks; then easing to 2.2% in Q4 on supply increases plus demand moderation; and averaging about 2.2% in 2022 on early elimination of slack plus policymaker commitments to keep fiscal and monetary levers atypically after full employment has been reached. Although the US case is the most prominent, much of the DM bloc exhibits similar characteristics and policy preferences, as discussed in this week's research note, Keep it simple: Inflation is a policy choice by Kasman and Lupton. Our point forecasts on core are not alarming. What is more unusual is the speed at which such a

Chart 2: Retail participation in Equities peaked in February, though this fade has impacted story stocks more than the aggregate market Total equity call option buying on US exchanges (millions, right scale) versus prices of various indices and ETFs indexed to 100 in 2014 (left scale).

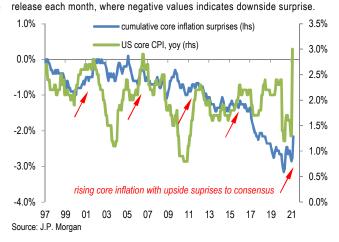


Chart 3: Diminishing liquidity via central bank tapering implies slower gains in the returns of a multi-asset portfolio, not losses

Year-on-year growth of global central bank balance sheets versus year-onyear returns of Equity & FICC multi-asset portfolio. Balance sheet growth figures for 2022 and 2023 are JPM estimates.



Chart 4: US core inflation is surprising to the upside as it rises, just as occurred during four previous reflationary episodes over the past 25 years US core CPI inflation versus cumulative surprises for monthly core CPI reports. Surprise calculated as difference between actual and expected





position will be achieved, as reaching 2% core sustainably didn't occur for several years after the end of the 2001 and 2008-09 recessions. That early arrival has implications for the risk distribution around Fed policy and thus asset prices, as discussed in bullet 3 below.

- 2) Neither the US economy nor another other large one is currently or likely to experience stagflation. High inflation and weak growth are negatives for almost all asset prices, given that inflation usually means higher rates and that much higher rates and rapidly-rising input costs usually imply falling profit margins (chart 4). Such was the backdrop in the 1970s and early 1980s. Commodities provide some portfolio insurance initially against this scenario because resource scarcity through a supply shock produces stagflation (chart 5). But eventually, the demand collapse from interest rate and margin stress drives commodity prices down too. The current backdrop differs from the 1970s and 1980s in numerous aspects, but some of the critical ones to recall are these: the starting rate of growth is much higher due to reopening effects and stimulus; the starting rate of inflation is much lower (1.5% core PCE rather than 6%) due to accrued central bank credibility; and commodity supply stress is absent in the systemically-important sector of Energy. When growth slows to sub-trend and inflation runs above target, we can revive the stagflation playbook, which is brief and boring (own Cash).
- 3) The US policies required to achieve higher inflation require higher risk premia in bond markets, but not all at once. Policy experiments are risky because economies are not controlled environments, which is why markets require a risk premium for mistakes. Examples of these risk premia include higher inflation breakevens; higher 10Y yields to compensate for inflation; a steeper money market curve to reflect the possibility of a faster tightening cycle; a higher terminal rate to reflect the possibility of a Fed that must turn restrictive in several years in order to ensure that core PCE's overshoot of 2% is mild (so stays under 3%); and a lower equity multiple plus wider credit spreads to reflect uncertainty over margins and financing rates as input costs and yields rise.
- Some of these risk premia have been rising this year, but the adjustments are not complete. US inflation breakevens have risen to about 2.5% in TIPS and in swaps, which implies expectations that core PCE will average about 2.2% after adjusting for the basis between headline CPI (on which linkers and swaps are priced) and core PCE. Given that the US nominal curve (US 10Y minus Fed funds rate) tends to track inflation expectations, current steepness of about 160bp appears low if current inflation breakevens persist, much less if they move somewhat higher eventually (chart 6). The money market curve is priced aggressively in expecting a first Fed hike in spring 2023, only a few months after the Fed presumably ends the tapering process. But the rest

Chart 4: Stagflation entails high inflation, weak growth and thin profit margins, so everything that 2021 isn't exhibiting

US corporate profit margins based on (NIPA profits) versus US core PCE inflation. Grey bars indicate recessions.

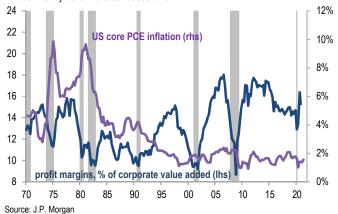
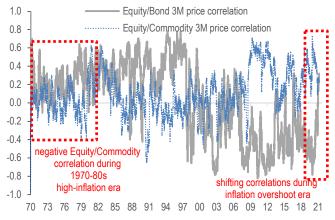


Chart 5: Commodities can replace Bonds as Equity hedges, if a highpressure economy revives a 1970/80s effect of positive Equity/Bond correlation and negative Equity/Commodity correlation

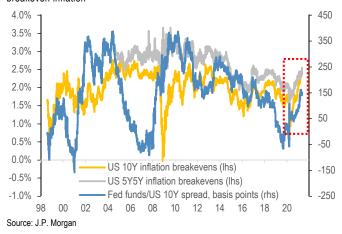
Rolling 3M correlation between prices US Equities & Bonds and of US Equities and Commodities



Source: J.P. Morgan

Chart 6: Inflation breakevens near 2.5% imply core PCE around 2.2%, so only a mild overshoot; the nominal curve is quite flat relative to breakevens.

UST curve steepness (US 10Y yield minus Fed funds rate) versus US 5Y5Y breakeven inflation

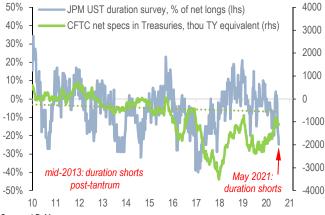


of the strip doesn't look very prepared in that its **terminal** rate of 2.5% would be close to zero in real terms. Such a level would be very low considering that Fed policy to contain inflation usually requires tightening until real cash rates are positive and somewhat aligned with the rate of real GDP growth. Hence why higher rates (end-2021 10Y target is 2%) and curve steepeners have been core calls this year. Yield target this year might be higher if investors weren't already quite short (chart 7), but it's hard to ignore this technical constraint (see Barry's *US* Government Bond Strategy section in US Fixed Income Markets Weekly).

- 4) Other markets are less affected and sometimes barely affected – by a rise in the bond market's duration premium. In Credit, ratings risk and default risk will almost certainly drift lower if the economy is expanding by three times trend this year and twice trend in 2022, implying above-average earnings growth as well. The only complication for Credit from an investor perspective (not a treasurer's) is that total returns will be negative for High Grade or well below average for High Yield due to duration losses. But there is no need for credit premia to rise with duration premia under the earnings cycle is much more mature and all-in financing costs punitive for very leveraged borrowers.
- In **Equities**, it's not unusual to witness derating (lower multiples) when earnings growth is improving postrecession. Usually, however, the cause is a major shock to earnings expectations rather than a rethink on Fed policy from a very low starting level of rates (chart 7). Examples of lower multiples despite stronger earnings include 2002 during the US accounting scandals, and 2010-12 during the EMU Crisis. Further derating is possible given the impact that higher yields have on the most expensive sectors (Tech, Communications, Discretionary), but when earnings growth will remain above-average into 2022, these two forces should net into moderate gains rather than losses, plus Value rotation and possible underperformance versus non-US Equities.
- Like Credit and Equities, Commodities do not require a higher risk premium for duration at this stage of the cycle except for Gold, which is a zero-yield asset. Others are positive carry when inventory conditions are tight enough to push curves into backwardation. More importantly, commodity prices are highly levered to inventory conditions due to lack of supply elasticity, so physical market conditions matter more for market direction than interest rates until such point that monetary policy slows demand growth (see Who's overpaying for scarcity in the May 7th J.P. Morgan View).
- 5) We'd be more concerned about the impact of higher rates on valuations if we thought asset bubbles were prevalent. Shifts in the monetary/liquidity environment since at least the mid-1980s has been associated with high-volatility declines in expensive markets, including

Chart 7: Duration shorts in US Treasuries are above average on two measures, even before the Fed has started talking about tapering

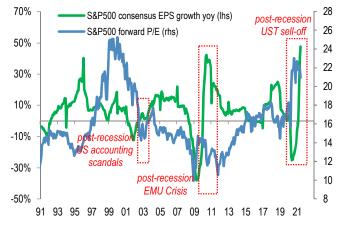
US Treasury positioning based on futures and JPM investor survey. Negative values indicate short duration exposure.



Source: J.P. Morgan

Chart 8: Equity derating when earnings growth is surging postrecession requires a greater macro event than higher rates

S&P500 1Y forward P/E versus consensus EPS growth



Source: J.P. Morgan

Chart 9: Single-stock valuations are so much higher than asset class ones (Nasdag) and even some themes (Clean Energy)

1Y forward P/E for Nasdaq, S&P 500 Clean Energy Index and TSLA stock



Source: J.P. Morgan

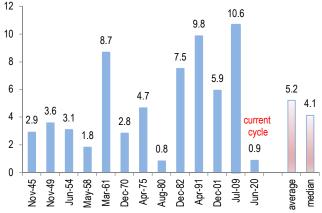


episodes such as Black Monday in 1987, the Nikkei in 1989, the Mexican Peso Crisis in 1994, the dot-com bubble burst in 2000, US sub-prime tremblors in 2006/early 2007, the Shanghai Composite's collapse in 2007, the taper tantrum in 2013, the EM credit crunch in 2015, and the S&P500's drop in December 2018. Some of these collapses were followed by full retracements, particularly if the next recession proved several years away. Other markets never reclaimed prior peaks, so are remembered as bubbles.

- A recent research note discussed how to distinguish bull markets from bubbles, and made a few observations. One is that fundamentally-justified bull markets and unsustainable asset bubbles are indistinguishable ex ante, as both involve a great narrative, strong price momentum and extreme valuations. Another is that expensive markets (defined as those whose standard, long-term valuation measure like forward P/E, credit spread or real commodity price) tend to become even more expensive for about a year, and sometimes a few years, before peaking. A third is that monetary tightening and/or recessions are usually the catalysts for deflating expensive markets. A final point is that 80% of seemingly expensive asset classes that derated in one business cycle return to previous highs in the next cycle, which questions whether markets are irrational at the asset class level or just a bit too forwardlooking (see *The merits of investing in rather than around* potential asset bubbles from April 30th).
- Our view on current, cross-asset valuations has been that several markets (US Large and Small Caps, Copper, Crypto) are quite expensive on naïve measures like two-sigma deviations on long-term value measures. But outside of possibly Crypto, other bubble hallmarks like outsized leverage (by investors, households or corporates) was lacking, as was a durable macro catalyst (Fed tightening will be more material that just tapering). So it is right to remain wary of single stocks and thematic investing where P/Es or other valuation measures have soared (chart 9), but it is hasty to apply these labels to asset classes without evidence of other vulnerabilities plus a very high-conviction view on macro or policy catalysts (chart 10).
- 6) No inflation hedge is cheap, but several are fairly priced and positive carry. A frequent critique of this baseline view higher but not high inflation nor yields, and somewhat stronger Equities without multiple derating is that it downplays the risk of a disorder. Not really we entered 2021 overweight all the typical inflation hedges (TIPS, Commodities ex Gold, Energy Equities, Value stocks) and short the defensives (Bonds, Staples/Utilities), on a view that the greatest risk in coming years was too much inflation rather than too little growth or not enough corporate profits. The strategy also

Chart 10: This young expansion has delivered a record share of expensive markets, but if strong growth persists, bubblets will only deflate partially

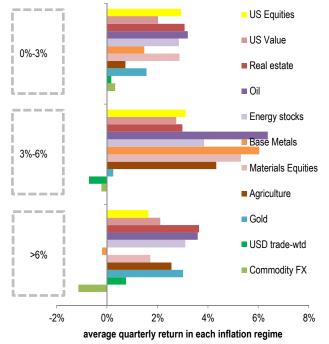
Length of US business cycle expansions in years based on NBER recession dates. NBER has not dated the current expansion, which we assume began in June 2020.



Source: J.P. Morgan

Chart 11: Market leadership rotates into real assets when US core PCE inflation exceeds 3%

Average quarterly returns since 1970 in four US core PCE inflation regimes. Regimes determined by level of US core PCE yoy change at the end of each quarter. Number of observation by regime: 117 for 0%-3%; 54 for 3%-6% and 33 for >6%.



Source: J.P. Morgan

recognized that inflation is a process rather than an event, and that this process almost always involves persistently strong growth that erodes slack. For a few years, that journey involves strong enough earnings to allow Equities to beat Bonds, and tight enough inventories to support Commodity prices. When this process turns disorderly because scarcity has become acute in labor and/or product

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markets, the commodity price rise will likely become non-linear (chart 11), which is why it remains the preferred hedge in direct or proxy form.

- Although the pace of investor inflows into various inflation hedges has jumped scales (chart 12), many hedges are still not expensive. A previous edition of JPM View discussed how the choice amongst real assets for a higher-inflation environment should consider performance during various inflation regimes, current valuations and carry rather than just the first factor (see Some like it hot: the best and worst inflation hedges as the US goes big on fiscal stimulus February 19th. Chart 13 combines the valuation and carry aspects to highlight why Commodities still outrank all others. A broad Commodities index (BCOM) still combines fair longterm valuations (due to Oil's weight) with positive carry. Oil futures, Energy Equities and Value Equites come next, followed by EM Commodity FX (RUB, BRL, ZAR), TIPS and Materials Equities. (Note that Materials Equities are cheaper than Base Metals themselves.) EM Commodity FX has moved up the list over the past three months due to rate hikes in Russia and Brazil. The worst is still Gold, despite its impressive performance during the high-inflation 1970s and early 1980s. It's simply still expensive in real terms and offers no yield.
- Alternative Assets Private Equity, Private Credit,
 Infrastructure, Natural Resources and unlisted Real Estate
 – cannot be added to this grid due to lack of data on
 current valuations, but the historical tendency of some
 sectors to outperform their public market equivalent when
 inflation rises suggest that a few of them (Private Equity
 with Value rather than Venture Capital tilt, Natural
 Resources, Infrastructure) could substitute for those in
 chart 13 (see *The role of Alternative Assets if the US* economy overheats in the April 9th J.P. Morgan View).

Chart 12: Investor flows into every traditional and non-traditional inflation hedge but Gold have soared this year

Cumulative flows into ETFs focusing on Gold, a Commodities index, US TIPS, Bitcoin and Energy plus Materials Equities. USD billions

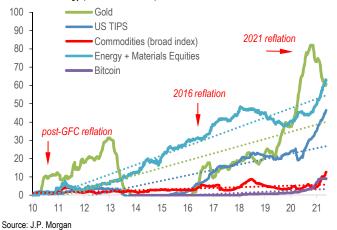
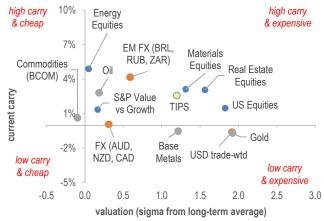


Chart 13: A Commodity index, Energy Equities, Oil futures, Value stocks and EM Commodity FX are the cheapest and highest carry real assets

Carry versus value on various asset classes, most of which are real assets or real asset proxies. Value expressed in sigma deviation from long-term average for 12M forward P/E on Equities, inflation-adjusted prices for Commodities, real exchange rates for FX and inflation breakevens for TIPS. Carry defined as yield on instrument (dividend yield on Equities, roll yield on Commodities) less funding cost.



Source: J.P. Morgan

Equities

- Global equity markets are stabilizing after retreating earlier in the week. Tech and cyclical sectors were among the worst performing this week, whereas defensives including Staples, Healthcare and Utilities did better. Banks were also an outperformer, given the spike in inflation and firmer bond yields.
- Our Global equity strategists have argued for a tactical stalling in equity markets: on the back of: 1) strong run ytd with no major pullback since October last year, 2) stretched technical/sentiment/positioning indicators, 3) seasonality, and 4) peaking in some activity indicators including US ISM, China M2 and credit impulse. They believe that Cyclical sectors – Capital Goods, Chemicals, Semis and Autos, among others – which have done extremely well over the past year, are in a consolidation phase, with Defensives better bid. They keep preference for Banks over Tech though, given elevated inflation concerns. While they believe SX5E will keep consolidating around the 4000 level, they believe that medium term Growth-Policy tradeoff is staying supportive, and would use the next 1-3 months phase as an opportunity to add. Regionally, EM have had a poor run this year, in contrast to SPX and SXXP. Looking at headwinds for EM's performance: 1) disappointing EM/DM growth differential. JPM economists don't expect EM growth momentum to turn positive vs DM before Q4. EM forward EPS relative to DM lost 4% ytd, which fully explains the relative index underperformance; 2) regulatory pressure on China's Internet sector. China represents 40% of MSCI EM weight, and Internet-related is almost 40% of the MSCI China weight. While a lot is in the price already, our China Internet analysts see this as a structural change and the headline newsflow risk is unlikely to go away in a hurry; 3) China activity momentum peaked and the policymakers are currently focused more on removing excess liquidity; and 4) there is a risk of renewed USD bounce, following the April weakness. Our strategists have in the past 2-3 months used some of the above as the arguments for their more cautious tactical EM stance, and they do not believe that these risks are fully exhausted yet. Having said that, there is a scope for better EM trading potentially entering 2H, as relative vaccinations and growth start converging (see *Equity* Strategy from May 10th by Matejka et al).
- The final leg of the earnings season approaches, with nearly 90% of companies having reported, in both US and Europe. Earnings delivery has been exceptional, with EPS growth surprising by over 20% vs already elevated expectations and significantly higher than the levels implied by the acceleration in activity momentum. In addition, the proportion of companies beating EPS estimates is the highest in at least the last decade. Cyclicals earnings have staged a strong rebound, with Discretionary and Financials in particular reporting very upbeat numbers,

while Defensives have lagged. Airlines, however, continue to see contracting bottom line growth. The stock price reaction to beats has been rather subdued, while misses were getting penalized, as per usual (see *Q1 Earnings Season Tracker* by Matejka et al from May 14th).

Bonds

- Bonds sold off this week with curves bear steepening amid inflation concerns following the stronger than expected US CPI print along with strong labor market data. While some of the increase in CPI is likely to be transitory, employment, CPI and import data all point to firming inflation. The commentary from Fed officials remains unequivocally dovish, however, and with the lack of key data in coming weeks there does not seem to be an obvious catalyst to push yields higher in the near term. Moreover, while valuations appear modestly rich, positioning has shifted more bearish. As a result, our strategists continue to prefer carry efficient bearish proxies and keep 3s/7s UST curve steepeners.
- In the Euro area, the rise in yields accelerated further this week with yields touching levels last seen in May 2019. At current levels, 10Y German yields are consistent with ECB policy rates rising by mid-2023 and an aggressive tapering of PEPP and APP purchases by late 2021. Our strategists see the tightening in financial conditions putting pressure on the ECB to keep the faster pace of PEPP purchases in place beyond the June meeting, but stop out of 2s/5s Germany flatteners and turn neutral on duration, while keeping some medium-term bearish exposure in options via 1s/10s EUR weighted bear steepeners. They retain only modest exposure to intra-EMU spread compression, and stay long 10Y Spain vs. Germany.
- In the UK, we see risks that UK inflation prints surprise to the upside, with risks to the medium-term picture also skewed to the upside. Our strategists turn bearish on duration, expressed via 1Yx1Y/5Yx5Y SONIA curve steepeners. In Australia, fiscal and monetary policy remain easy and committed to supporting growth, with QE absorbing more than 100% of ACGB issuance even as global yields rise. Our strategists stay long 10Y ACGBs vs. USTs and hold a 3s/10s AUD EFP box steepener as well as 3s/5s ACGB flatteners.
- In EM, CEE central banks look set to scale back the size of their bond purchase programs through 2H21 amid rising inflation and a shift in monetary policy signals. This backdrop reinforces our strategists' structural UW's in CEE duration via Poland and Czech Republic (see <u>CEE Strategy</u> by Siddiqui et al from May 11th). They remain UW EM local duration overall, with UWs in Latam via Chile and Peru in addition to the EMEA EM UWs. In EM Asia, they are N with an UW in Malaysia offset by OWs in China and Thailand (see <u>EM Local Markets Roundup</u> by Harrison from May 10th).



Credit

- Pre-pandemic, the growth in the private credit and/or
 the direct lending space was seen to represent one of
 the more meaningful, medium-term risks for global
 credit markets. Among other things, this narrative was
 based on a lack of transparency; concerns regarding
 lending to levered corporates otherwise unable to access
 public capital markets; and, as a subtext to this, lax
 underwriting standards.
- Regardless, private credit assets under management have continued to grow, driven by the reach for yield as much as anything else. As the world continues to normalize, it is not unnatural to see these concerns resurface at some point. In this edition of Crisis Watch, the team attempts to put some context around the size of the private credit market in both absolute terms and relative to the size of public debt capital markets; investigate the extent to which private credit is disintermediating the traditional role of banks and competing with public markets; as wells as looking at private credit's footprint in public markets given the slew of issuance by BDCs, as well as an estimate of the banking system's direct exposure via portfolio financing and backup lines of credit (see Crisis Watch XLV: Private Credit Uncovered by Dulake et al from Mar 13th).

Currencies

- The two shocking US data surprises in the past week leave the US macro-policy outlook in a limbo. At stake are two very divergent scenarios with very different dollar implications. The dovish scenario, where the Fed materially delays QE tapering at risk of allowing a less contained inflation overshoot, implies yields driven higher by greater inflation risk premium being priced into the belly and back of the US rates curves, even as real yields remain depressed. As shown in FXMW, this is a dollar-unfriendly type of yield curve steepening. The hawkish scenario is where the Fed marches ahead or even pulls forward tapering plans in response to very strong demand conditions and surprisingly strong and persistent inflation as a result. Real rates grind higher, and FX resumes the dollar-positive.
- Prior Fed guidance would suggest a tendency towards the dovish scenario. This underscores the necessity for the Fed to clarify how guidance might need to evolve to accommodate the latest data. Yet, in terms of US rates pricing, spritely inflation expectations are already well baked in (though not de-anchored) while it is real-rates that are more mispriced and more vulnerable to a correction. While this seems to imply that the dollar outlook is as uncertain as the US macro-policy outlook, there is an important additional overlay, namely the large negative correlation between equities and yields that has unfolded. This suggests that even under a dovish Fed scenario, a priced inflation overshoot sufficient to drive

- nominal (if not real) yields higher could spook risky markets, and in turn provide anti-cyclical support for the dollar.
- The drivers of both scenarios stem from an underlying reality that the demand side of the US economy is very strong, and exceptionally so. Thus, even though nearterm risks are that the Fed sounds very dovish in light of recent data, this neither fully invalidates the relevance of US exceptionalism, nor implies a wholesale negative turn for the USD. In the portfolio, the team continues to hold onto a small set of core USD longs (vs GBP and JPY) and long DM petro FX as a reflation play and inflation hedge (long NOK vs SEK & JPY in cash, long CAD/JPY in options), making JPY, which is most clearly exposed to higher US yields under various conditions, the primary funder.

Commodities

- As WTI prompt prices continues its trek higher, the deferred portion of the WTI forward curve has also found strength. Just six months ago, deferred tenors—defined as calendar strip 2025 and beyond—hovered at or moderately above \$45/bbl. Today, they have risen to just shy of \$55/bbl, likely the result of mounting cost inflation risks. In 2022, cost inflation, are likely to impact breakeven prices for the US complex. Using history as a guide, the team has embedded an 18% increase in drilling and completion costs in the 2022 crude production outlook.
- Our strategists also anticipate more stringent environmental regulations and tax policy to support prices in the longer-term. This includes: a) Biden's tax policy which could increase well breakeven costs by as much as 14%; b) increasing risk—particularly in Europe—for a carbon-based border adjustment tax; and c) the recent step closer in the reinstatement of Obama-era methane emissions regulations.
- As cost inflation lingers over the US upstream community, the rise in deferred pricing of late in the crude market appears justified. As a result, the team would peg a soft floor in deferred price as a result of rising costs to production at \$50—55/bbl for WTI and \$2.75/MMBtu for Henry Hub natural gas. While the US crude market has seemingly adjusted to these risks, upside potential for price certainly remains for US natural gas prices.
- In the near-term, US oil demand should increase to 20.6 mbd in 3Q21 and for the year as a whole, the projection is for US demand rising 1.8 mbd on last year's levels, with 85% of that achieved during the summer driving season. Demand for gasoline and, in turn, strong gasoline refinery margins should drive an increase in refinery runs. With gasoline demand pushing refinery runs higher and still—weak jet fuel demand keeping diesel yields elevated, US diesel inventories should build throughout the balance of 2021 (see <a href="#marging-merging-new-marging-new-mergi



Cross-asset forecasts & strategy

					, ,
Rates	Current	Jun-21	Sep-21	Dec-21	Mar-22
US (Fed funds)	0.06	0.00	0.00	0.00	0.00
10-year yields	1.64	1.75	1.85	1.95	2.05
Euro area (depo)	-0.50	-0.50	-0.50	-0.50	-0.50
10-year yields	-0.13	-0.35	-0.25	-0.20	-0.10
Italy-Germany 10Y (bp)	120	80	75	85	90
Spain-Germany 10Y (bp)	71	55	50	55	55
United Kingdom (repo)	0.10	0.10	0.10	0.10	0.10
10-year yields	0.86	0.95	1.05	1.15	1.20
Japan (call rate)	-0.10	-0.10	-0.10	-0.10	-0.10
10-year yields	0.08	0.10	0.15	0.15	0.15
EM Local (GBI-EM yield)	4.96			4.81	
Currencies	Current	.lun.21	Sen-21	Dec-21	Mar-22

Currencies	Current	Jun-21	Sep-21	Dec-21	Mar-22
JPM USD Index	118	120	121	121	121
EUR/USD	1.21	1.19	1.18	1.17	1.16
USD/JPY	109	108	107	106	106
GBP/USD	1.41	1.39	1.38	1.37	1.36
AUD/USD	0.78	0.76	0.74	0.73	0.73
USD/CNY	6.44	6.60	6.55	6.50	6.50
USD/KRW	1129	1130	1120	1115	1115
USD/MXN	19.84	20.75	21.25	21.50	21.75
USD/BRL	5.26	5.55	5.50	5.45	5.40
USD/TRY	8.46	8.50	9.00	9.50	10.00
USD/ZAR	14.13	14.25	14.00	14.25	14.50
Commodition	Current	Lun 24	Son 24	Dec 24	Max 22

UUDIZAN	14.10	14.23	14.00	14.23	14.50
Commodities	Current	Jun-21	Sep-21	Dec-21	Mar-22
Brent (\$/bbl, qtr end)	69	67	73	74	75
WTI (\$/bbl, qtr end)	65	65	70	71	71
Gold (\$/oz, qtr avg)	1,839	1,650	1,590	1,550	1,500
Copper (\$/ton, qtr avg)	10,329	9,000	8,180	7,550	7,550
Aluminum (\$/ton, qtr avg)	2,430	2,200	2,050	1,965	1,925
Iron ore (US\$/dt, qtr avg)	201	170	160	150	140
Wheat (\$/bu, qtr avg)	7.3	6.1	6.0	6.3	
Soybeans (\$/bu, qtr avg)	16.2	10.5	10.5	10.5	

Source: Bloomberg, Datastream, J. P. Morgan

Credit		Current	Dec-21			
US High Grade (bp over UST)	JPM JULI	117	110			
Euro High Grade (bp over Bunds)	iBoxx HG	94	90			
US High Yield (bp vs. UST)	JPM HY	405	375			
US Lev Loans (bp vs. 3Y Index)	JPM LL	437	450			
Euro High Yield (bp over Bunds)	iBoxx HY	316	300			
EM Sovereigns (bp vs. UST)	JPM EMBIGD	354	334			
EM Corporates (bp vs. UST)	JPM CEMBI	250	225			
Equities		Current	Dec-21			
S&P 500		4,168	4,400			
MSCI Europe		1,756	1,830			
MSCI Eurozone		252	268			
FTSE 100		7,044	7,100			
Topix		1,883	1,900			
MSCI EM (\$)		1,293	1,450			
MSCI China		102	125			
MSCI Korea		966	900			
MSCI Taiwan		638	605			
MSCI India		1,704	1,430			
Brazil (Ibovespa)		121,292	134,000			
Mexico (MEXBOL)		49,159	46,300			
MSCI South Africa		1,446	1,795			
Fauity sector recommendations & year-to-date returns						

Equity sector recommendations & year-to-date returns

	U	S	Euro	ре	Japa	an	EN	l
Energy	38%	OW	16%	N	30%	N	6%	N
Materials	20%	N	18%	OW	8%	N	19%	OW
Industrials	15%	N	13%	N	5%	OW	5%	N
Discretionary	2%	OW	13%	N	3%	OW	-11%	OW
Staples	5%	UW	8%	UW	-2%	N	-2%	UW
Healthcare	8%	OW	5%	N	-12%	UW	0%	UW
Financials	27%	OW	17%	OW	19%	OW	5%	OW
Technology	1%	OW	10%	N	2%	N	-1%	N
Comm	11%	N	12%	UW	3%	UW	1%	N
Ütilities	5%	UW	1%	OW	4%	UW	2%	UW
Real Estate	14%	UW	0%	UW	12%	N	-1%	OW

Core strategic and tactical recommendations by asset class

	Strategic (6M to 2Y trades)	Tactical (1M to 6M trades)
Asset allocation	Above-average OW of DM Equities & HY Credit vs Cash/Bonds; neutral EM complex – OW Equities & Corporates but short duration, underweight FX and neutral Sovereigns	Reduced Credit overweight in May edition of <u>Global Asset Allocation</u>
Equities	Country: biased towards US after Value rotation is more complete Sector: OW Healthcare; UW Staples, Utilities, REITs Style: biased towards OW Growth again	Country: OW EM ex China, EMU & Japan vs US, UK, rest of world Sector: OW Cyclicals (Discretionary, Financials, Energy) Style: OW Value
Bonds	DM Duration: Neutral EM Duration: OW China, Mexico & UW Chile, Peru, Czech, Poland, Malaysia in GBI-EM.	DM Duration: neutral DM Curve: steepeners in US (3s/7s), flatteners in Germany (2s/5s), neutral elsewhere DM Inflation: neutral US, long in AU (1Y), short Euros (5Y5Y) DM Spread: OW Spain (10Y) vs GE; OW AU (10Y) vs US
Credit	US HG: OW Yankee Banks, Energy, Utilities, Cap Goods & Telecoms; UW US Banks, Healthcare, Tech & Retail US HY: OW Gaming, Transport; UW Healthcare, Tech, Cable, Paper, Industrials Euro HG: OW Autos, Toll Roads & Mail, Transport; UW Healthcare, Chemicals, Tech, Media Euro HY: OW Transport, Paper, Retail; UW Chemicals, Telecoms	US HY: OW CCCs & Bs vs BBs Euro HG: Long AT1, sold protection on Itraxx Main super senior Euro HY: Long Itraxx Crossover vs Sub Financials EM Sovereigns: OW Nigeria, Qatar EM Corporates: favour HY over HG globally; OW China (Property), CEEMEA Utilities, Latam Commodities
Currencies	Few strategic trades; most currency positions are tactical	Long USD vs CHF, GBP, JPY & NZD; long CAD & NOK vs JPY & SEK; OW MXN & ZAR vs HUF & PLN in GBI-EM
Commodities	Long JPMCCI Agricultural sub-index	Long Oil, short Gold & neutral Base Metals

Source: J.P. Morgan flagship weekly and monthly strategy publications, including Global Asset Allocation, available on www.jpmm.com. Red shading indicates higher-conviction view



Global economic forecasts

	I	Real GDP				Real GD	P				Consume	r prices	
	%o	vera yeara	go		%over	previous p	eriod, saa	r		%over a year ago			
	2020	2021	2022	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	4Q20	2Q21	4Q21	2Q22
Jnited States	-3.5	6.7	4.1	4.3	6.4	10.0	8.3	3.0	3.5	1.2	4.2 ↑	3.7 ↑	2.3
Canada	-5.4	6.6	4.1	9.6	6.5	4.0	7.5	5.5	3.5	0.8	2.8	2.3	1.9
atin America	-6.6	5.6 ↑		16.9	1.8 ↑	-0.3 ↑	3.6				5.9	5.0	3.8
Argentina	-9.9	5.8	1.7	19.4	5.0	-6.0	3.0	1.5	2.0	36.2	48.6 J	50.4 J	46.1
Brazil	-4.1	4.1 ↑		13.3	2.3 ↑	-4.0 ↑					7.5	6.2	4.6
Chile	-5.8	6.9	3.4	30.1	4.0	1.0	8.0	4.5	3.0	2.9	4.0	3.8	3.3
Colombia	-6.8	7.5	3.6	26.5	3.5	2.6	4.4	5.0	2.5	1.6	2.6	3.5	3.2
Ecuador	-7.8	2.0	3.0	2.3	3.0	2.5	4.0	4.0	3.0	-1.1	-1.6	0.4	0.5
Mexico	-8.2	6.5	3.7	13.7	1.8	6.6	3.8	3.5	3.8	3.5	5.5	4.4	3.0
Peru	-11.1	9.9	6.1	38.1	-14.0	-4.0	6.0	11.0	8.0	2.2	2.0	1.9	2.3
Uruguay	-5.9	2.8	3.0	6.8	0.0	0.5	1.5	2.7	4.0	9.6	6.9	7.1	6.7
Asia/Pacific	-1.2	7.6	4.8	13.2 ↓	, 5.2	2.9 ↓	7.7	5.3	↑ 4.8	0.7	1.8 ↑	2.3 ↑	2.3
Japan	-4.9	3.9	2.6	11.7	-1.0	2.0	9.0	3.0	2.0	-0.8	0.0	- 0.1	0.6
Australia	-2.4	4.2	2.8	13.1	2.3	4.2	3.7	2.4	2.3	0.9	3.5	2.1	1.8
New Zealand	-3.0	3.5	3.8	-3.8	-2.2	3.3	3.3	4.6	3.9	1.4	2.1	1.9	1.9
EM Asia	-0.2	8.7	5.5	13.6 ↓		3.1 ↓		5.9	5.6 ↑		2.1 ↑	2.8 ↑	2.7
China	2.3	9.3	5.7	14.1	4.3	6.8	5.5	5.7	5.5	0.1	1.4	2.6	2.4
India	-7.6	11.2	5.8	24.7	17.0	-16.0	22.0	9.0	5.0	6.4	4.9 ↑	4.5 ↑	5.3
Ex China/India	-2.8	5.6 ↓	4.9 ↑	6.5 ↓		3.7 ↓	5.8	4.9	6.0	0.5	2.3 ↑	2.4 ↑	2.0
Hong Kong	-6.1	7.8	2.8	2.0	23.4 ↑	1.0	5.0	3.5	2.3	-0.3	0.9	2.5	2.1
Indonesia	-2.1	5.0	4.8	8.9	6.2	6.0	5.0	5.0	5.5	1.6	1.7 ↑	2.4 ↑	2.4
Korea	-1.0	4.6	4.1	5.0	6.6	3.0	7.0	5.0	4.0	0.4	2.3	2.3	1.6
Malaysia	-5.6	6.8	4.8 ↓	-5.9 ↓		2.5 ↓	4.0	4.0	↓ 5.5 ↑	-1.5	2.8	1.9	1.8
Philippines	-9.5	5.3 ↓		16.0 J	-	3.6 ↑				3.1	4.5	3.6	2.3
Singapore	-5.4	7.8	5.9	15.9	8.2	5.0	5.0	5.0	10.0	-0.1	2.0 ↑	2.2 ↑	1.4
Taiwan	3.1	8.0	3.8	5.8	12.9	4.8	6.0	3.5	3.3	0.0	2.1	2.2 ↑	1.9
Thailand	-6.1	3.9	8.2	5.4	<u>4.0</u>	2.0	5.0	5.0	16.0	-0.4	3.0 ↓	2.3 ↑	2.5
Western Europe	-7.1	5.3	5.1 ↓	-1.1	<u>-2.9</u>	9.1 ↑			3.8	-0.1	1.8	2.4	1.4
Euro area	-6.7	4.9	5.1	-2.7	-2.5	<u>6.5</u>	14.5	5.5	4.0	-0.3	1.8	2.4	1.3
Germany	-5.1	3.9	5.1	2.2	-6.6	8.0	16.0	4.0	4.0	-0.6	2.1	3.4	1.7
France	-8.2	6.3	4.7	-5.4	1.8	0.0	16.0	4.0	4.0	0.1	1.8	1.9	1.3
Italy	-8.9	5.9	5.7	-7.2	-1.6	10.0	14.0	6.0	4.5	-0.4	1.2	1.9	1.3
Spain	-10.8	6.6	7.4	0.1	-2.0	10.0	15.0	11.0	6.5	-0.8	2.1	2.8	2.0
Norway	-3.1	3.4 ↓		8.3 ↑		3.5	10.0	4.0	3.0	1.3	2.8 ↓	2.6	1.3
Sweden	-3.0	4.4	3.4	-1.0	4.4	8.0	5.0	3.5	3.0	0.6	1.7 ↑	1.3 ↑	1.2
United Kingdom	-9.8	7.9 ↑		5.2	-5.9 ↑	<u>22.1</u> ↑		•	•	0.6	1.8 ↑	2.4 ↑	2.1
EMEA EM	-2.7	4.5	4.1	6.6	2.0 ↓	3.3 ↑		4.0	3.7	4.9	6.7 ↑	6.2 ↑	4.7
Czech Republic	-5.6	4.0	5.5	2.5	-1.2	5.0	11.0	7.0	4.5	2.6	2.9 ↑	3.1 ↑	2.5
Hungary	-5.0	5.1	5.7	5.6	<u>-0.5</u>	5.3	10.0	7.0	4.7	2.8	5.0 ↑	4.7 ↑	3.4
Israel	-2.5	6.6	5.5	6.5	<u>3.6</u>	7.4	5.7	5.3	5.3	-0.7	1.3	1.3	1.2
Poland	-2.7	4.6	5.9	-2.0	3.6 ↓	5.2 ↑		7.5	5.0	2.8	4.4	4.6	2.9
Romania	-3.9	6.0	6.5	20.7	<u>-0.9</u>	6.1	11.2	7.0	2.8	2.1	3.4 ↑	4.1 ↑	3.5
Russia	-3.0	3.7	2.8	8.1	3.5	3.3	3.5	3.0	2.8	4.5	5.8 ↑	5.3 ↑	4.1
South Africa	-7.1	4.3	2.4	6.3	1.8	2.8	2.2	2.5	2.4	3.2	4.5	4.5	4.6
Turkey	1.8	4.8	4.1	6.9	<u>-0.8</u>	-2.0	0.4	0.8	4.5	13.5	16.9	14.7	10.5
Global	-3.6	6.5	4.5	7.4	3.4 ↑	6.1 ↑	8.9	4.5	↓ 4.0	1.1	3.0 ↑	3.0 ↑	2.3
Dev eloped markets	-5.0	5.8	4.3	3.6	2.1 ↑	8.4 ↑	10.4	4.0	3.4	0.5	2.8 ↑	2.7 ↑	1.8
Emerging markets	-1.5	7.6	4.9	13.1	5.5 ↑	2.6	6.7	5.3	↓ 4.9 ↓	1.9	3.2 ↑	3.6 ↑	3.1
Emerging ex China	-4.6	6.3 ↑	4.3	12.3		-0.8 ↑	7.7	5.0		3.4	4.8 ↑	4.4 ↑	3.7
Global — PPP weighted	-3.3	6.9	4.7	9.0		4.8 ↑	9.0	4.8		1.6	3.2 ↑	3.3 ↑	2.7

Note: For some emerging economies seasonally adjusted GDP data are estimated by J.P. Morgan. Bold denotes changes from last edition of *Global Data Watch*, with arrows showing the direction of changes. Underline indicates beginning of J.P. Morgan forecasts. Unless noted, concurrent nominal GDP weights calculated with current FX rates are used in computing our global and regional aggregates. Regional CPI aggregates exclude Argentina, Ecuador and Venezuela. Regional GDP aggregates exclude Venezuela. Forecasts for Argentina are based on JPMorgan's estimates of GDP and CPI. Source: J.P. Morgan.



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J.P. Morgan Equity Research Ratings Distribution, as of April 03, 2021

	Overweight	Neutral	Underweight
	(buy)	(hold)	(sell)
J.P. Morgan Global Equity Research Coverage*	49%	38%	12%
IB clients**	54%	48%	38%
JPMS Equity Research Coverage*	46%	39%	14%
IB clients**	78%	70%	55%

^{*}Please note that the percentages might not add to 100% because of rounding.

For purposes only of FINRA ratings distribution rules, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category. Please note that stocks with an NR designation are not included in the table above. This information is current as of the end of the most recent calendar quarter.

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^{**}Percentage of subject companies within each of the "buy," "hold" and "sell" categories for which J.P. Morgan has provided investment banking services within the previous 12 months.



models used, please see the Summary of Financials in company-specific research reports and the Company Tearsheets, which are available to download on the company pages of our client website, http://www.jpmorganmarkets.com. This report also sets out within it the material underlying assumptions used.

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J.P. Morgan Credit Research Ratings Distribution, as of April 03, 2021

	Overweight	Neutral	Underweight
Global Credit Research Universe*	30%	54%	16%
IB clients**	61%	64%	63%

^{*}Please note that the percentages might not add to 100% because of rounding.

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