

Equity Strategy

Equity P/E multiples in historical context - earnings vs bond yield spread is now below 2007 levels

- The bulk of the equity performance so far this year, and indeed in the past 18 months, was driven by multiple expansion. **Globally, 12m forward earnings are up only 7% from the lows, in contrast to nearly 30% P/E upmove** - top table. Current US forward P/E multiple of 21.4x is up 6% ytd, up 20% since Oct '23 and 30% from Oct '22 lows. European P/Es are up by a similar magnitude, but from a lower starting point. At sector level, the consistent valuation laggards during this near 30% P/E expansion are to be seen among Defensives, such as Utilities and Staples, but also in European Banks. Within the rerating, winners are generally Semis and Industrials.
- 2024 EPS projections are again down small in the US ytd, and are more meaningfully lower in Europe. At the same time, bond yields are higher, squeezing ERPs. **Global earnings yield vs bond yield differential has been moving lower, to be now below 2007 levels** - see middle chart. Central banks are set to deliver some cuts in 2H, but in order to justify current equity valuations, we believe that we will need to see at least some earnings acceleration, as well.
- The P/E expansion that took place is reflective of a view by investors that activity momentum is in the process of bottoming out, and that earnings growth is set to accelerate this year, and beyond. Indeed, IBES is projecting a sequential pickup in earnings growth between 2023 and 2026.
- Ultimately, equity valuations will end up responding to earnings momentum trends, as there is **a clear historical correlation between P/E multiples and earnings revisions**, with the last 18 months seeing an easing in the downtrend of earnings downgrades. The question is whether we will see an outright uptrend next? Our concern is that profit growth could underwhelm, for a number of reasons - see our recent [report](#) for details. If the earnings acceleration fails to materialize, this could act as a constraint, in particular for Cyclical sectors, which are currently trading at price and P/E relative highs vs Defensives - see [report](#).
- Regionally, China equities showed no rerating over the past 18 months, still trading around 9x forward, which is at absolute and relative lows.** Compared to past trends, **Europe overall is clearly not expensive**, it is US and Japan that have moved above historical ranges. Notably, **Eurozone trailing buybacks yield is at present quite close to US** - bottom chart. At the same time, Eurozone dividend yield at 3.0% is much higher than US at 1.3%, and bond yields are meaningfully lower - with these 3 together resulting in a **much better total equity yield vs bond yield for Eurozone equities than for the US, of 240bp** - we closed US vs Eurozone OW [last week](#).
- Overall, if central banks turn out to be more dovish than currently projected, but without this being accompanied by growth disappointments, present equity multiples could be defended. However, if activity momentum, and in particular earnings delivery, disappoints, and central banks end up more reactive than proactive, then we think that equity multiples would need to fall.

Equity Strategy

Mislav Matejka, CFA ^{AC}

(44-20) 7134-9741

mislav.matejka@jpmorgan.com

J.P. Morgan Securities plc

Prabhav Bhadani, CFA

(44-20) 7742-4404

prabhav.bhadani@jpmorgan.com

J.P. Morgan Securities plc

Nitya Saldanha, CFA

(44 20) 7742 9986

nitya.saldanha@jpmchase.com

J.P. Morgan Securities plc

Karishma Manpuria, CFA

(91-22) 6157-4115

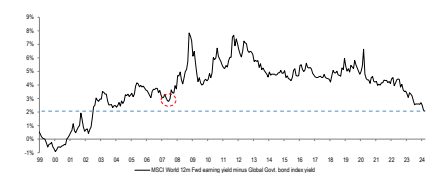
karishma.manpuria@jpmchase.com

J.P. Morgan India Private Limited

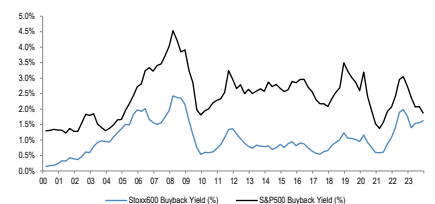
MSCI World saw 7% earnings improvement in the past 18 months, contrasted with almost 30% P/E rerating...

Key regions	Current PE	Oct'22 PE	% change	% change in 12m Fwd EPS
Japan	16.1	12.1	33%	12%
US	21.4	16.5	30%	7%
World	18.7	14.6	28%	7%
Europe	13.8	11.1	24%	11%
Eurozone	13.4	10.7	25%	19%
UK	11.3	9.0	26%	-12%
EM	12.1	10.5	16%	1%
China	9.2	9.5	-3%	1%

...global equity earnings yield relative to government bond yield has been deteriorating in the past few years - and is now below 2007 levels...



...regionally, European buybacks yield is now almost as high as US one... this, together with much higher dividend yield and a lower bond yield helps Europe vs the US from the valuation perspective



Source: Datastream, IBES, J.P. Morgan.

See page 23 for analyst certification and important disclosures, including non-US analyst disclosures.

J.P. Morgan does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

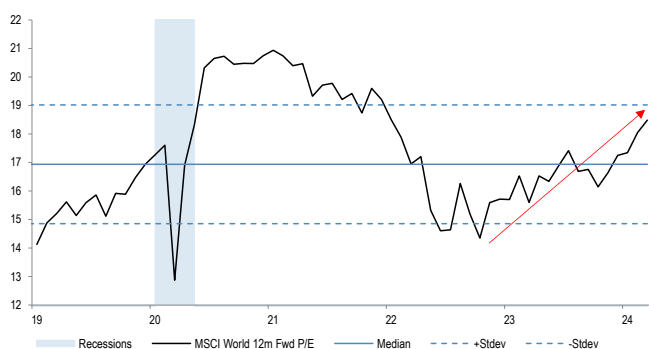
Table Of Contents

Equity P/E multiples in a historical context - earnings vs bond yield spread is now below 2007 levels	3
Equity Strategy Key Calls and Drivers	12
Top Picks	13
Equity Flows Snapshot.....	14
Technical Indicators.....	15
Performance	16
Earnings	17
Valuations.....	18
Economic, Interest Rate and Exchange Rate Outlook	20
Sector, Regional and Asset Class Allocations.....	21

Equity P/E multiples in a historical context - earnings vs bond yield spread is now below 2007 levels

Global equity P/E multiples have rerated strongly in the last 18 months...

Figure 1: MSCI World 12m Fwd. P/E



Source: IBES

MSCI World 12m Fwd. P/E has moved up from 14.6x in October '22 to 18.7x at present.

Table 1: Key regions - Current vs Oct '22 forward P/Es and EPS moves

Key regions	Current PE	Oct'22 PE	% change	% change in 12m Fwd EPS
Japan	16.1	12.1	33%	12%
US	21.4	16.5	30%	7%
World	18.7	14.6	28%	7%
Europe	13.8	11.1	24%	11%
Eurozone	13.4	10.7	25%	19%
UK	11.3	9.0	26%	-12%
EM	12.1	10.5	16%	1%
China	9.2	9.5	-3%	1%

Source: IBES

This near 30% P/E expansion contrasts to a modest 7% increase in forward earnings. US and Japan have rerated the most. Europe is not far behind, but from a much lower starting point.

Table 2: Key regions - Current vs Jan '24 12m Fwd. P/E

Key regions	Current PE	Jan'24 PE	% change	% change in 12m Fwd EPS
Japan	16.1	13.9	16%	4%
Eurozone	13.4	12.4	8%	-1%
World	18.7	17.5	7%	2%
Europe	13.8	12.9	7%	-1%
US	21.4	20.2	6%	3%
UK	11.3	10.7	5%	-3%
China	9.2	8.7	5%	-1%
EM	12.1	11.6	5%	0%

Source: IBES

Nearly all the performance ytd can be attributed to multiple expansion.

Table 3: Key regions - Current vs Oct '23 12m Fwd. P/E

Key regions	Current PE	Oct'23 PE	% change	% change in 12m Fwd EPS
Eurozone	13.4	11.1	21%	3%
US	21.4	17.8	20%	4%
World	18.7	15.7	19%	3%
Europe	13.8	11.7	18%	2%
Japan	16.1	13.8	17%	8%
UK	11.3	10.0	13%	-6%
EM	12.1	11.2	9%	5%
China	9.2	9.2	0%	1%

Source: IBES

The same goes for the strong equity rally seen since last October.

...Cyclicals are ahead, Defensives have missed out

Table 4: MSCI US L2 sectors - Current vs Oct '22 PE

MSCI US sectors	Current PE	Oct'22 PE	% change
Semicon	30.4	15.3	99%
Met&Min	17.8	10.4	72%
Chemicals	21.7	13.8	57%
Div Fin	19.8	13.4	48%
Energy	12.8	8.7	48%
Cons Durables	17.7	12.2	45%
Software	32.6	23.4	39%
Transport	21.8	16.0	36%
Media	21.7	16.5	32%
Banks	11.6	8.8	32%
Cap Goods	21.1	16.2	30%
US	21.4	16.5	30%
Cons Mat	29.4	22.7	30%
Hotels,Rest&Leis	27.7	23.2	19%
Food Drug Ret	24.5	20.7	18%
Healthcare	18.9	16.2	17%
Tech Hardware	22.8	19.6	16%
Real Estate	36.5	32.1	14%
Insurance	13.5	12.2	11%
Prof. Services	27.8	25.1	11%
Retailing	30.8	27.8	11%
Telecoms	9.5	8.7	9%
HPC	23.5	22.1	6%
Food Bev&Tob	16.8	17.4	-3%
Utilities	15.6	18.2	-14%
Automobile	21.6	25.4	-15%

Source: IBES

At a sector level, the divergence between Cyclical sectors and Defensives is clear. Semis have seen the strongest rerating in the past 18 months, while Defensives like Staples and Utilities have lagged.

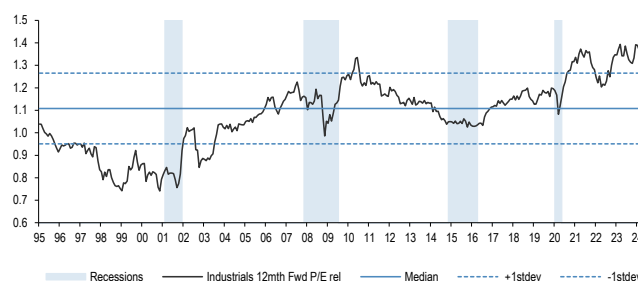
Table 5: MSCI Europe L2 sectors - Current vs Sep '22 PE

MSCI Europe sectors	Current PE	Sep'22 PE	% change
Transport	15.9	7.7	106%
Met&Min	10.0	5.4	85%
Semicon	32.6	18.9	72%
Energy	7.6	4.5	70%
Chemicals	23.2	14.1	64%
Cons Mat	13.7	8.7	57%
Software	29.8	19.0	57%
Div Fin	14.4	9.5	51%
Cons Durables	23.9	16.8	42%
Cap Goods	19.1	13.7	39%
Real Estate	13.9	10.0	39%
Automobile	6.4	4.7	35%
Tech Hardware	15.6	11.9	31%
Europe	13.8	10.6	30%
Insurance	10.7	8.5	26%
Healthcare	17.2	14.1	22%
Prof. Services	21.7	18.2	19%
Media	16.2	13.7	18%
Hotels,Rest&Leis	22.3	19.6	14%
Banks	7.0	6.2	12%
Telecoms	12.7	12.2	4%
HPC	18.9	18.9	0%
Food Drug Ret	11.6	12.1	-4%
Utilities	11.9	12.7	-7%
Food Bev&Tob	15.8	17.5	-10%
Retailing	15.1	19.0	-21%

Source: IBES

In Europe, beyond commodities which rerated, but had poor earnings delivery, Semis and Industrials were the winners, while again Staples and Utilities were among the biggest laggards.

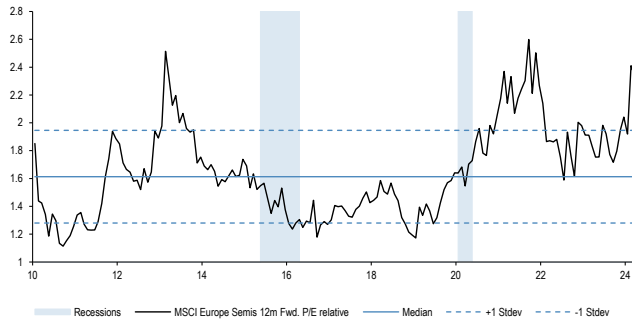
Figure 2: MSCI Europe Industrials 12m Fwd P/E relative



Source: Datastream

European Industrials are now trading at record P/E premium to the broader market.

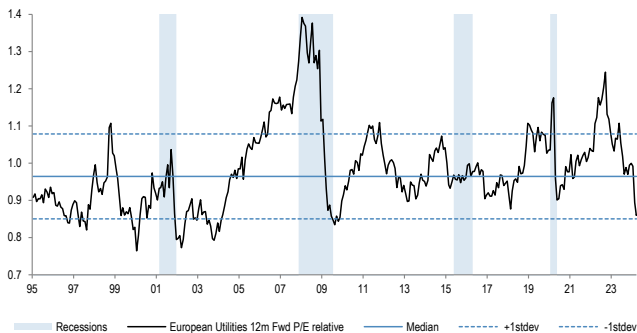
Figure 3: MSCI Europe Semis 12m Fwd P/E relative



Source: Datastream

European Semis valuations are also near record, more than 2 standard deviations expensive.

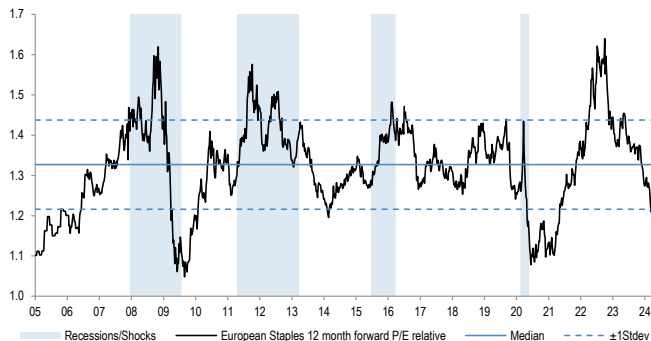
Figure 4: MSCI Europe Utilities 12m Fwd. P/E relative



Source: Datastream

On the other hand, Utilities have derated meaningfully in the last 19 months.

Figure 5: MSCI Europe Staples 12m Fwd. P/E relative

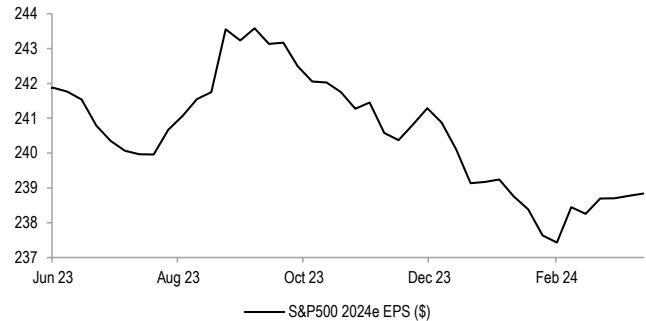


Source: Datastream

Valuations for Staples have come down significantly, as well.

Earnings projections have failed to advance so far this year...

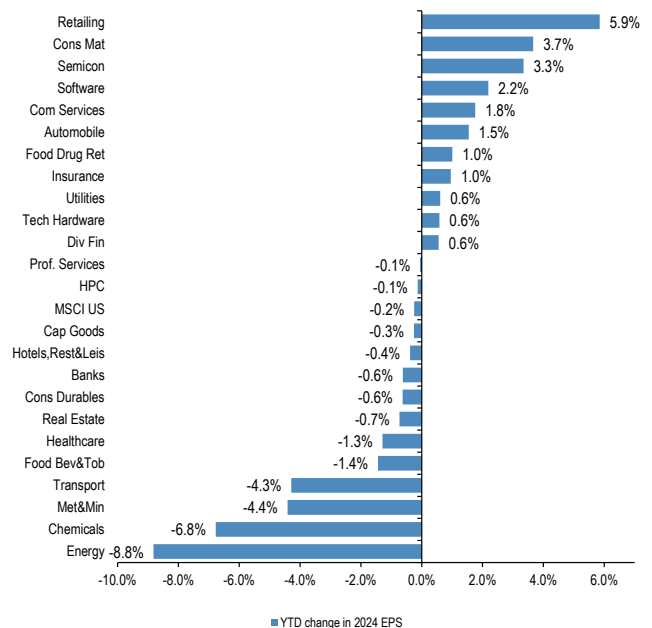
Figure 6: S&P500 2024e EPS projections



Source: IBES

Consensus US EPS projections for 2024 are small down ytd, continuing the downward trend seen last year.

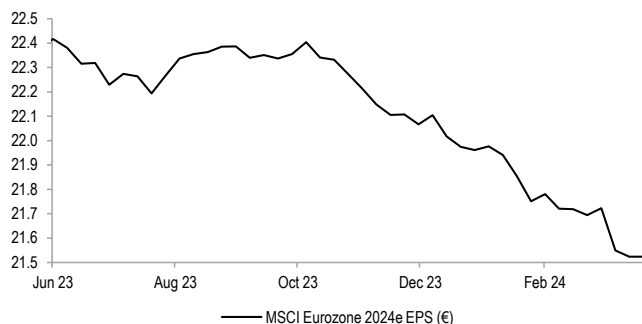
Figure 7: MSCI US L2 sectors 2024e EPS level change - ytd



Source: IBES

Sector leadership is quite mixed, with Tech generally revised up, and commodities and defensives revised down.

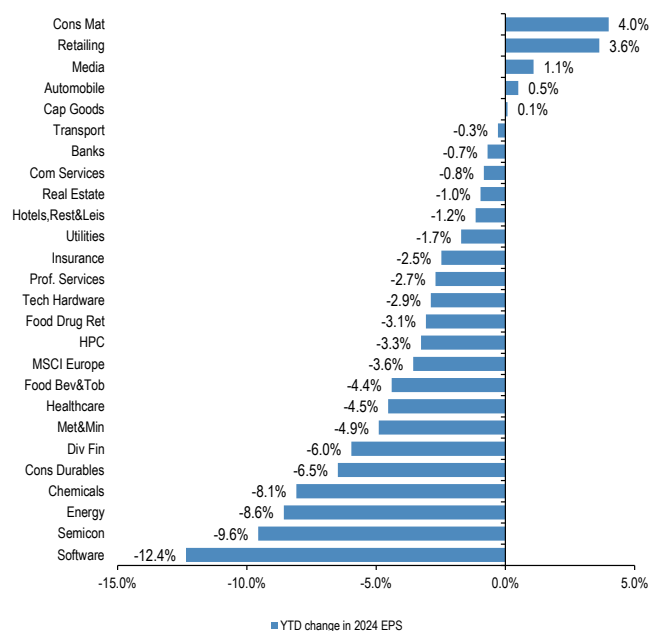
Figure 8: MSCI Eurozone 2024e EPS



Source: IBE

In Europe, the earnings cuts are even more prominent.

Figure 9: MSCI Europe L2 sectors 2024e EPS levels change ytd

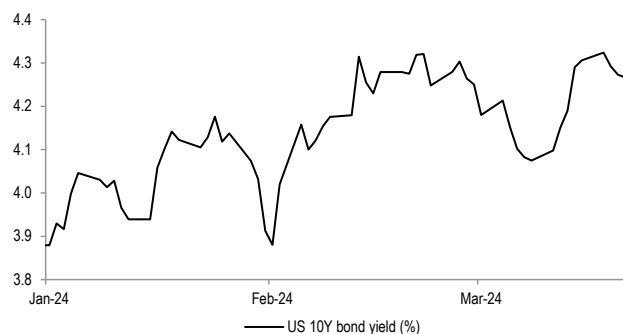


Source: IBES

The vast majority of sectors has seen net downgrades this year.

...at the same time, bond yields moved up, both ytd and in the past 18 months...

Figure 10: US 10Y bond yield



Source: Bloomberg Finance L.P.

Multiple expansion coincided with higher bond yields ytd and vs 18 months ago.

Figure 11: US 1 Year Inflation Swap

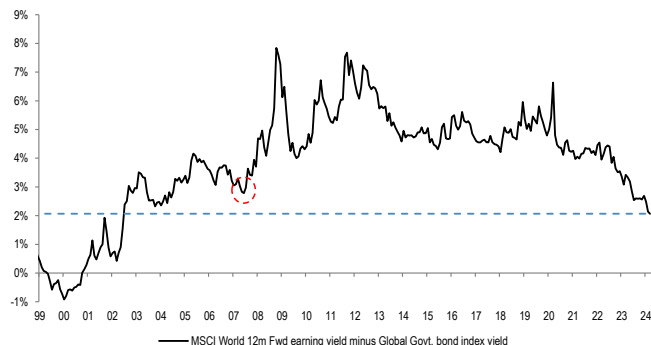


Source: Bloomberg Finance L.P.

Some of the higher bond yield is due to more optimistic growth outlook, but some has to be due to sticky inflation, as see in 1 year US inflation swap rate moving back to last October highs.

...resulting in a squeeze to ERPs... earnings yield vs bond yield has deteriorated

Figure 12: MSCI World 12m Fwd earnings yield minus Global Govt bond yield



Source: Datastream

Lagging earnings delivery and higher bond yields have squeezed ERPs. Yield on equities no longer appears attractive, compared to other asset classes. In fact, the differential between the earnings yield and bond yield has now moved below 2007 levels.

Consensus expectation is that earnings will accelerate from here, which should plug the valuation gap...

Table 6: MSCI World consensus EPS growth projections

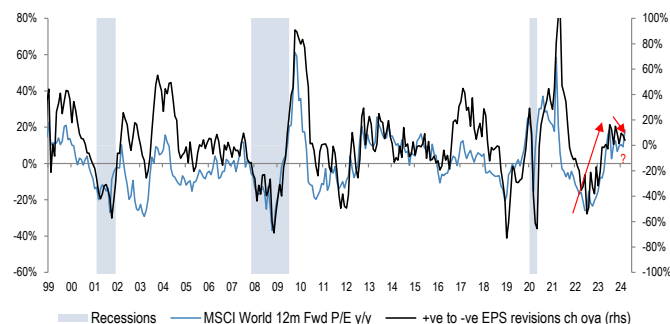
	MSCI World			
	2023	2024e	2025e	2026e
Market	1.2%	7.7%	12.2%	10.7%
Energy	-25.5%	-8.8%	9.1%	6.4%
Materials	-31.4%	3.5%	10.7%	6.9%
Industrials	6.7%	8.0%	12.2%	10.9%
Discretionary	33.9%	9.1%	13.2%	13.5%
Staples	2.2%	4.3%	8.8%	8.0%
Healthcare	-13.6%	12.2%	13.3%	11.2%
Financials	13.2%	6.2%	9.8%	10.7%
IT	5.4%	14.6%	18.9%	13.9%
Com Services	22.2%	17.9%	13.7%	11.0%
Utilities	10.7%	5.4%	5.0%	4.7%
Real Estate	-7.4%	1.2%	8.5%	8.4%

Source: IBES

The bulls argue that earnings delivery will come, and that will end up justifying current multiple expansion. Indeed, IBES is projecting a meaningful acceleration in earnings growth this and next year.

...we agree that earnings delivery will be key from here...

Figure 13: MSCI World 12m Fwd PE and EPS Revisions

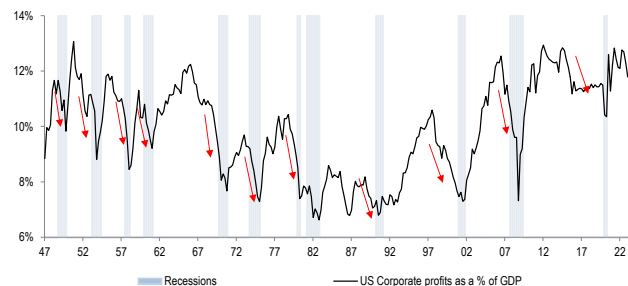


Source: IBES

Ultimately, the earnings momentum is key for equity valuations, as per the very strong correlation between P/Es and EPS revisions seen in the above chart. While there was an easing in the downtrend of earnings downgrades in the past year, the concern is whether this can sustain.

...we worry that the consensus expectations for an earnings acceleration are too optimistic

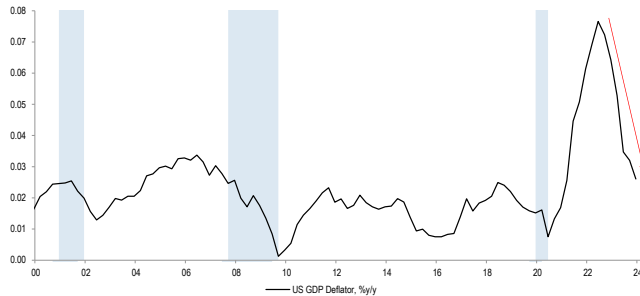
Figure 14: US NIPA Profit Margins



Source: Federal Reserve Economic Data (FRED)

We think that earnings delivery might underwhelm the optimistic consensus projections for the following 4 reasons: 1. hurdle rate is high, with profit margins elevated in the historical context, as seen in the above chart, 2. pricing and topline are likely to keep normalizing, 3. Net interest expense is set to normalize, 4. ULCs could pick up on higher wages and lower productivity.

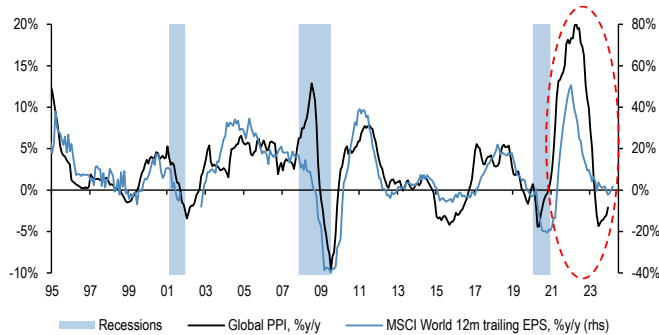
Figure 15: US GDP Deflator



Source: FRED

We note the continued unwind of COVID distortions will mean lower topline and weaker pricing power.

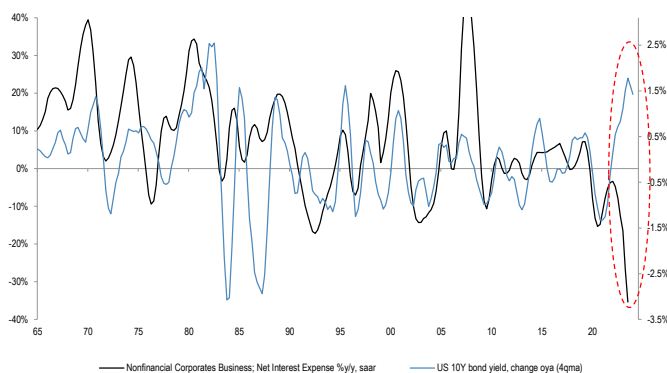
Figure 16: MSCI World EPS vs Global PPI



Source: Datastream, IBES

Earnings are likely to follow PPI lower.

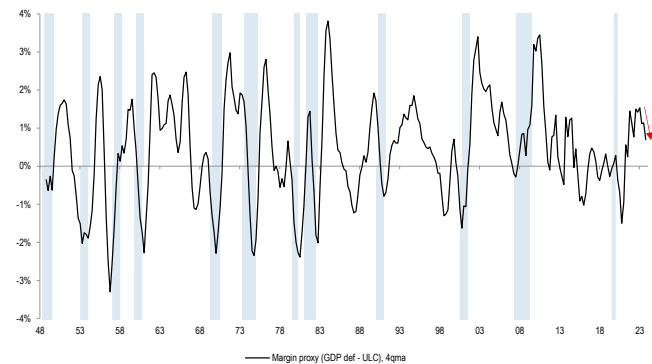
Figure 17: Nonfinancial corporates business: Net Interest Expense versus US 10Y bond yield



Source: Bloomberg Finance L.P., FRED

Net interest expense for corporates actually went down as interest rates rose. This should unwind irrespective of the future direction of interest rates.

Figure 18: US GDP Deflator minus ULC

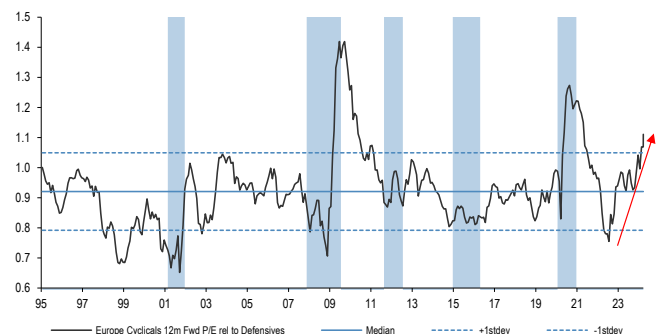


Source: J.P. Morgan

A cyclical improvement in productivity, helped by excess liquidity, pent up demand and aggressive government spending, supported margins in the past year, even with wages acceleration, keeping ULCs low. These are likely to change from here, with ULCs set to rise.

Cyclical sectors are stretched vs Defensives

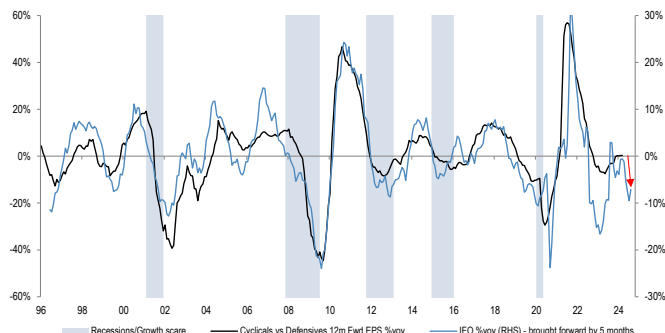
Figure 19: European Cyclical 12m Fwd P/E rel to Defensives



Source: Datastream

Within the market, Cyclical sectors have moved from outright cheap vs Defensives at end '22 to outright expensive at present.

Figure 20: Cyclical vs Defensives 12m Fwd EPS and IFO



Source: Datastream, J.P. Morgan

Therefore, it is key for them to show earnings acceleration, but a number of indicators such as ISM, manufacturing PMIs and IFO are staying mixed.

Regionally, China appears very cheap...

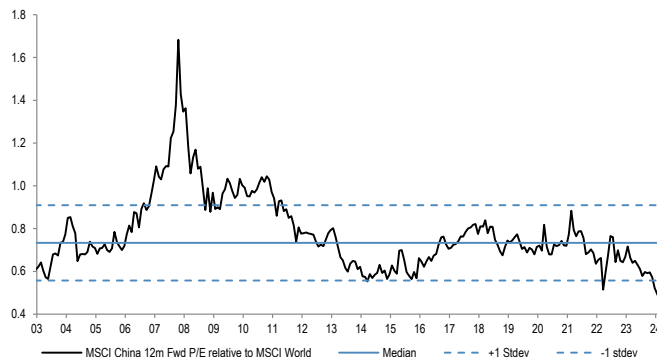
Figure 21: MSCI China



Source: Datastream

In contrast to other markets, China had a terrible 2023, down almost 40% until recently

Figure 22: MSCI China 12m Fwd. P/E relative to MSCI World

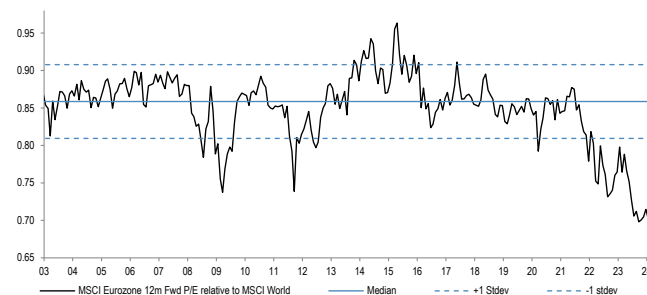


Source: IBES

As a result, MSCI China screens attractive, at 9x forward P/E, and is trading record cheap vs MSCI World.

...Europe is attractive, as well...

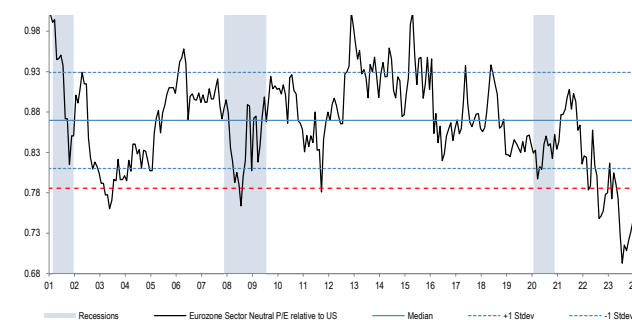
Figure 23: MSCI Eurozone 12m Fwd. P/E relative to MSCI World



Source: IBES

Eurozone equities also appear cheap, relative to MSCI World.

Figure 24: MSCI Eurozone Sector Neutral P/E relative



Source: Datastream

This is true even adjusting for sector biases.

...we have recently advised to close the UW on Eurozone vs the US...

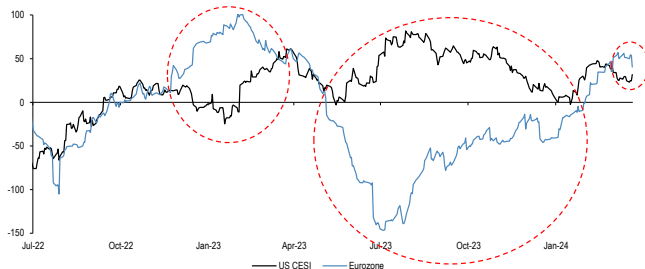
Figure 25: MSCI Eurozone vs MSCI US



Source: Datastream

After being bullish on Eurozone vs the US in the first part of 2023, we have turned UW last May. Most recently again, we have advised last week to close the UW on Eurozone vs the US.

Figure 26: Eurozone and US CESI

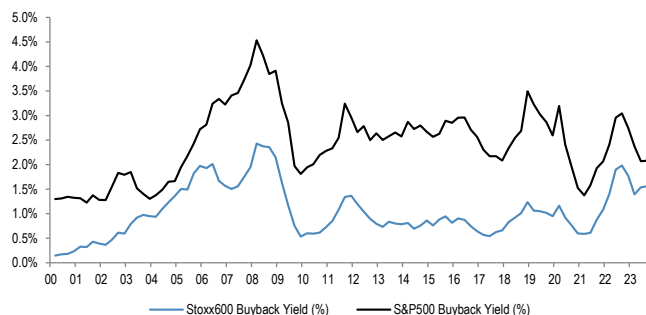


Source: Bloomberg Finance L.P.

Relative growth disappointments might be ending for Eurozone, which should help its performance.

...European total equity yield vs bond yield is very attractive, compared to the US

Figure 27: Europe and US Buyback yield



Source: Bloomberg Finance L.P.

In addition, total shareholder yield looks increasingly attractive in the region. European stocks have historically had a higher dividend yield than their US peers, but the region typically lagged the US in terms of buybacks. This is changing, the buyback yield for the US and Europe appear to be converging.

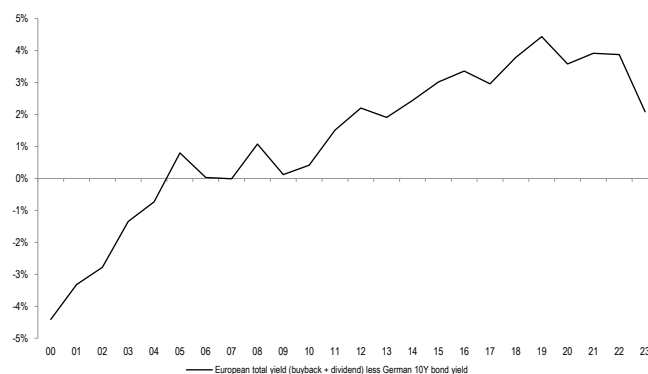
Table 7: DM Yield gap in historical context

	Dividend yield	10Y Bond yield	Dividend yield minus bond yield	Average since '00	Current vs Average (bp)
US	1.3%	4.3%	-2.9%	-1.4%	-154
Japan	1.9%	0.7%	1.2%	0.9%	28
Eurozone	3.0%	2.9%	0.1%	0.4%	-30
UK	4.0%	4.0%	0.0%	0.6%	-59

Source: Datastream

Relative to bond yields, Eurozone is not far from fair value, while the US dividend yield-bond yield gap is more negative.

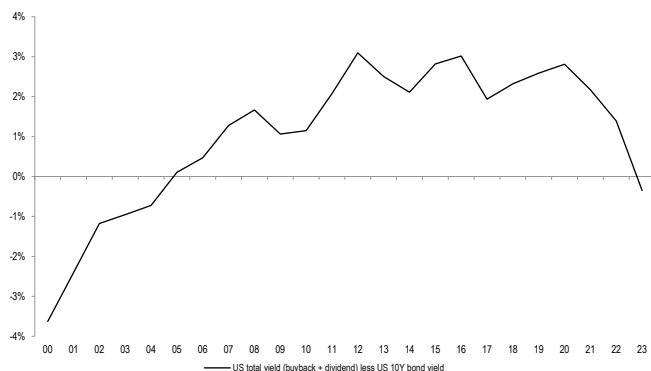
Figure 28: European total yield minus bond yield



Source: Bloomberg Finance L.P.

European total equity yield vs bond yields is still around 2% positive.

Figure 29: US total yield minus bond yield

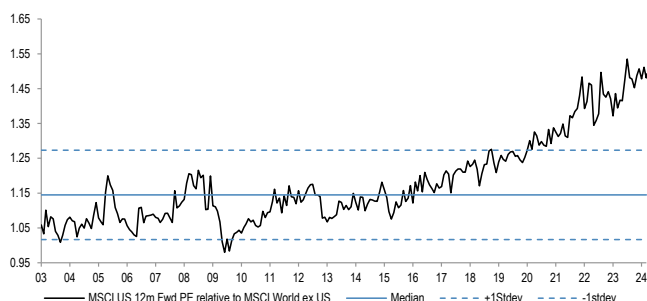


Source: Bloomberg Finance L.P.

US total yield in contrast has dipped negative vs bond yields. Put together, this gives Eurozone the advantage of around 240bp.

...it is US which is very expensive... Japan not so

Figure 30: MSCI US 12m Fwd. P/E relative to World ex US



Source: IBES

On the back of continuous rerating, the US is now trading more than 2 standard deviations expensive vs the World.

Figure 31: MSCI Japan 12m Fwd. P/E relative to MSCI World

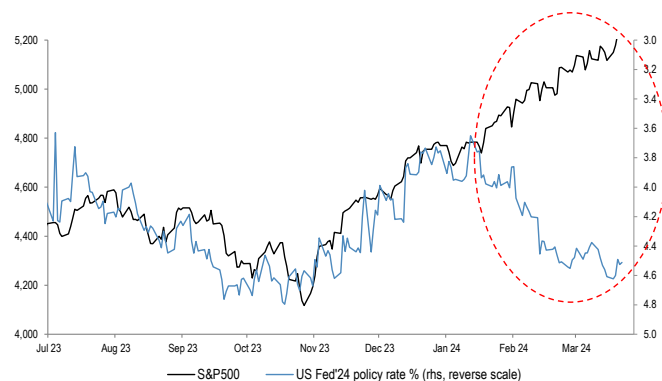


Source: Datastream

Finally, we have been OW Japan the whole of last year, and even though it has rerated, we note that it is not much above historical relative vs the World.

If either the activity momentum, or the central banks, disappoint, equity multiples could weaken

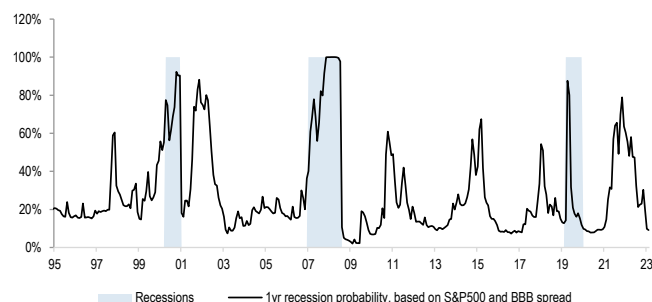
Figure 32: S&P500 and Fed funds futures



Source: Bloomberg Finance L.P.

Investors at present have a full focus on Goldilocks setup, growth to have no landing but at the same time central banks are expected to be accommodative. If either of these assumptions proves to be wrong, there is a risk of derating. The above chart shows that Fed futures have fully round-tripped to last October levels, but equities are so far ignoring this.

Figure 33: US Recession probability



Source: J.P. Morgan.

Also, recession odds implied in the market are now at record lows, which might be too optimistic, as a number of positive drivers from last year, pent up demand, excess liquidity, extremely high job opening rate, fiscal stimulus, high corporate topline growth and elevated pricing power might be waning.

Equity Strategy Key Calls and Drivers

So far this year, US and Japan are ahead of other markets, Growth is outperforming Value and large caps are again beating small in all key regions. We continue to believe that this, ultimately unhealthy, high concentration and narrow leadership is set to stay for a while longer. To buy Value and International stocks one needs to see a reflationary backdrop, in our view, but we could have the opposite. In terms of bond yields, we argued last October to go long duration, but also in January to look for a tactical bounce back in bond yields, as Fed easing became overdiscounted in markets. We now think that the counter-rally in yields might be running out of steam, and would advocate to go long duration again. The move back higher in Fed futures might be getting done – they round-tripped back to October levels, and activity momentum could soften from here. The question is, why didn't equities weaken as US 10-year yields backed up 50bp during Jan-Feb? We think that this is because investors assumed that the yield upmove is reflective of economic acceleration, but we note that earnings projections for 2024 are not reacting positively – they keep coming down in most sectors. If the growth acceleration does not come through, this could act as a headwind. We last week closed UW Eurozone vs US trade, as relative growth disappointments for the region are likely at their peak and growth style in US is at a risk of a reversal given it is already so stretched.

Table 8: J.P. Morgan Equity Strategy — Factors driving our medium-term views

Driver	Impact	Our Core Working Assumptions	Recent Developments
Global Growth	Neutral	At risk of weakening as consumer strength wanes	Global composite PMI is at 52.1
European Growth	Negative	Manufacturing and services are converging on the downside; industry data stays weak	
Monetary Policy	Neutral	Fed pivot could be accompanied by activity weakness	
Currency	Neutral	USD could strengthen again	
Earnings	Negative	Corporate pricing power is likely to weaken from here	2024 EPS projections are continuing their downtrend
Valuations	Negative	At 21x, US forward P/E is still stretched, especially vs real yield	MSCI Europe on 13.8x Fwd P/E
Technicals	Negative	Sentiment and positioning are stretched post the Nov-Dec rally	RSIs are in overbought territory

Source: J.P. Morgan estimates

Table 9: : Base Case and Risk

Scenario	Assumption
Upside scenario	No further hawkish tilt by the Fed. No landing
Base-case scenario	Inflation to fall further, risk of downturn still elevated. Earnings downside from here
Downside scenario	Further Fed tightening and global recession to become a base case again

Source: J.P. Morgan estimates.

Table 10: Index targets

	Dec '24 Target	21-Mar-24	% upside
MSCI Eurozone	256	297	-14%
FTSE 100	7,700	7,883	-2%
MSCI EUROPE	1,850	2,053	-10%
DJ EURO STOXX 50	4,250	5,052	-16%
DJ STOXX 600 E	460	510	-10%

Source: J.P. Morgan.

Table 11: Key Global sector calls

Overweight	Neutral	Underweight
Healthcare	Technology	Capital Goods ex A&D
Telecoms	Discretionary	Food& Drug Retail
Food, Beverage & Tobacco	Mining	Autos
Real Estate	Transportation	Banks
Utilities		

Source: J.P. Morgan

Table 12: J.P. Morgan Equity Strategy — Key sector calls*

Sector	Recommendations	Key Drivers
Healthcare	Overweight	Potential for lower yields and stronger dollar remain near term support, earnings are also holding up
Staples	Overweight	Sector is one of the best performers around the last Fed hike in the cycle, lower bond yields and better relative EPS momentum should further support
Banks	Underweight	Downgraded to UW in October after 3 years of strong performance. Bond yields and PMIs direction is the key for the potential P/E re-rating of the sector, we think both will move lower
Chemicals	Underweight	The sector trades at 70% premium to the market, well above historical norm. pricing continues to deteriorate, downside risks to current earnings and margin projections

Source: J.P. Morgan estimates. * Please see the last page for the full list of our calls and sector allocation.

Table 13: J.P. Morgan Equity Strategy — Key regional calls

Region	Recommendations	J.P. Morgan Views
EM	Neutral	China tactical chance for a bounce, but structural bearish call remains
DM	Neutral	
US	Neutral	Expensive, with earnings risk. Growth style at a risk of reversal
Japan	Overweight	Japan is attractively priced; diverging policy path and TSE reforms are tailwinds
Eurozone	Neutral	Eurozone trading at a record discount vs the US; Growth differential to improve
UK	Overweight	Valuations still look very attractive, low beta with the highest regional dividend yield

Source: J.P. Morgan estimates.

Top Picks

Table 14: J.P. Morgan European Strategy: Top European picks

Market Cap							EPS Growth			Dividend Yield	12m Fwd P/E			Performance	
Name	Ticker	Sector	Rating	Price	Currency	(€ Bn)	23e	24e	25e	24e	Current	10Y Median	% Premium	-3m	-12m
ENI	ENI IM	Energy	OW	14	E	48.3	-35%	-13%	2%	6.4%	6.7	12.7	-47%	-6%	15%
TOTALENERGIES	TTE FP	Energy	OW	63	E	150.2	-33%	-3%	2%	5.0%	7.5	10.6	-29%	1%	14%
SHELL	SHEL LN	Energy	OW	31	E	197.8	-23%	0%	6%	3.9%	8.0	11.2	-29%	3%	17%
CRH PUBLIC LIMITED	CRH LN	Materials	OW	86	US\$	54.6	-14%	22%	8%	1.6%	15.9	15.0	6%	26%	72%
RIO TINTO	RIO LN	Materials	OW	5048	£	100.7	-11%	7%	-9%	6.8%	8.4	10.3	-18%	-13%	-5%
NORSK HYDRO	NHY NO	Materials	OW	61	NK	10.7	-60%	16%	41%	4.1%	11.2	12.9	-13%	-7%	-17%
ANGLO AMERICAN	AAL LN	Materials	OW	1924	£	27.7	-51%	-8%	6%	3.9%	10.9	9.5	14%	0%	-26%
SCHNEIDER ELECTRIC	SU FP	Industrials	OW	217	E	124.3	2%	15%	11%	1.6%	25.2	16.5	53%	20%	46%
ASHTAD GROUP	AHT LN	Industrials	OW	5560	£	28.4	26%	1%	7%	1.4%	17.0	14.1	21%	2%	9%
RYANAIR HOLDINGS	RYA ID	Industrials	OW	21	E	24.0	-	33%	34%	0.0%	9.4	13.1	-28%	9%	40%
AIRBUS	AIR FP	Industrials	OW	169	E	135.2	10%	4%	24%	1.4%	24.1	18.4	31%	22%	39%
MTU AERO ENGINES HLDG.	MTX GR	Industrials	OW	225	E	12.2	24%	13%	11%	1.6%	17.7	18.1	-2%	15%	-2%
STELLANTIS	STLAM IM	Discretionary	OW	27	E	85.4	12%	-7%	1%	5.8%	4.9	4.8	2%	27%	66%
BMW	BMW GR	Discretionary	OW	105	E	66.2	-35%	-8%	1%	5.4%	6.4	7.7	-17%	5%	-
INDITEX	ITX SM	Discretionary	OW	46	E	143.1	27%	-	-	-	24.0	24.3	-1%	18%	59%
ADIDAS	ADS GR	Discretionary	OW	199	E	35.7	-154%	-	139%	0.4%	52.1	24.6	112%	2%	38%
RICHEMONT N	CFR SW	Discretionary	OW	138	SF	82.2	78%	-3%	11%	1.8%	19.8	20.4	-3%	17%	-2%
COMPASS GROUP	CPG LN	Discretionary	OW	2242	£	45.0	50%	14%	12%	1.9%	22.3	20.8	7%	6%	13%
COLRUYT GROUP	COLR BB	Staples	OW	42	E	5.4	-27%	61%	9%	1.9%	15.4	17.6	-13%	4%	72%
ANHEUSER-BUSCH INBEV	ABI BB	Staples	OW	55	E	111.2	-5%	9%	14%	1.4%	17.3	19.5	-12%	-5%	-4%
NOVO NORDISK 'B'	NOVOB DC	Health Care	OW	894	DK	538.6	52%	26%	22%	1.1%	36.1	22.7	59%	28%	78%
ASTRAZENECA	AZN LN	Health Care	OW	10428	£	189.2	9%	12%	13%	2.2%	15.6	17.8	-12%	-1%	-4%
SMITH & NEPHEW	SN/ LN	Health Care	OW	1033	£	10.5	1%	12%	18%	2.9%	13.4	18.4	-27%	-4%	-11%
UBS GROUP	UBSG SW	Financials	OW	28	SF	100.0	-99%	3590%	99%	2.2%	22.6	10.4	118%	7%	44%
NATWEST GROUP	NWLG LN	Financials	OW	253	£	26.2	38%	-25%	9%	6.7%	6.4	10.3	-37%	17%	-7%
ING GROEP	INGA NA	Financials	OW	15	E	51.5	106%	-13%	9%	7.6%	7.7	9.1	-15%	7%	30%
INTESA SANPAOLO	ISP IM	Financials	OW	3	E	60.1	79%	15%	2%	9.0%	7.1	10.1	-30%	25%	40%
LONDON STOCK EXCHANGE GROUP	LSEG LN	Financials	OW	9560	£	59.9	2%	11%	14%	1.2%	25.3	22.7	11%	3%	24%
AMUNDI (WI)	AMUN FP	Financials	OW	63	E	12.9	4%	4%	7%	6.5%	9.7	12.7	-24%	3%	10%
DASSAULT SYSTEMES	DSY FP	IT	OW	41	E	54.5	6%	7%	10%	0.6%	31.3	31.5	-1%	-8%	10%
ASML HOLDING	ASML NA	IT	OW	923	E	363.3	41%	-6%	52%	0.7%	43.5	26.9	62%	35%	55%
ASM INTERNATIONAL	ASM NA	IT	OW	586	E	28.4	-8%	5%	38%	0.5%	43.2	16.3	165%	24%	78%
DEUTSCHE TELEKOM	DTE GR	Telecoms	OW	22	E	109.9	-13%	10%	12%	3.5%	12.1	14.2	-15%	1%	0%
BT GROUP	BT/A LN	Telecoms	OW	107	£	12.7	9%	-12%	-1%	7.2%	5.8	8.8	-35%	-15%	-24%
RELX	REL LN	Industrials	OW	3451	£	75.7	12%	8%	9%	1.7%	27.5	19.3	42%	12%	34%
HELLOFRESH	HFG GR	Staples	OW	7	E	1.2	-49%	-18%	57%	0.0%	11.6	19.0	-39%	-52%	-59%
RWE	RWE GR	Utilities	OW	31	E	23.3	30%	-54%	-20%	3.2%	11.6	13.0	-11%	-24%	-21%
ENEL	ENEL IM	Utilities	OW	6	E	61.8	22%	4%	1%	7.5%	9.0	12.0	-25%	-9%	11%
SEGRO	SGRO LN	Real Estate	OW	889	£	14.0	6%	7%	7%	3.1%	25.0	25.3	-1%	-1%	20%

Source: Datastream, MSCI, IBES, J.P. Morgan, Prices and Valuations as of COB 21st Mar, 2024. Past performance is not indicative of future returns.

Please see the most recent company-specific research published by J.P. Morgan for an analysis of valuation methodology and risks on companies recommended in this report. Research is available at <http://www.jpmorganmarkets.com>, or you can contact the cover

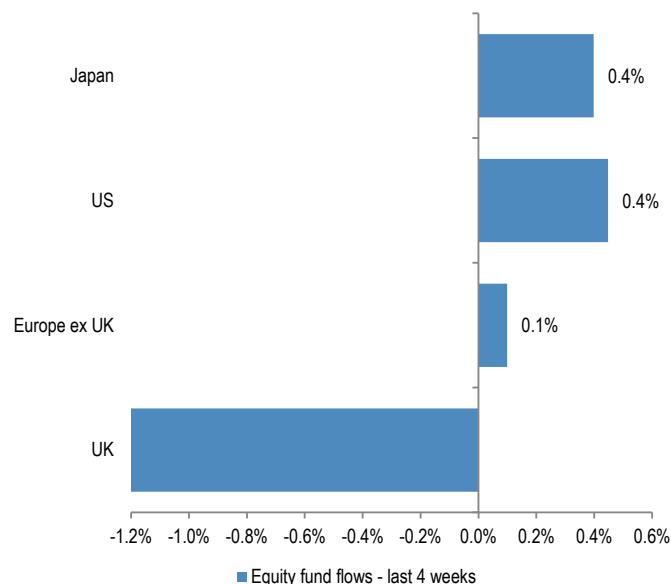
Equity Flows Snapshot

Table 15: DM Equity Fund Flows Summary

	Regional equity fund flows					Regional equity fund flows				
	\$mn					% AUM				
	1w	1m	3m	ytd	12m	1w	1m	3m	ytd	12m
Europe ex UK	-246	329	-1,701	-1,506	-13,345	-0.1%	0.1%	-0.5%	-0.5%	-4.6%
UK	-1,011	-3,246	-6,039	-5,922	-28,862	-0.4%	-1.2%	-2.2%	-2.2%	-11.0%
US	-22,024	45,208	75,697	58,206	199,379	-0.2%	0.4%	0.8%	0.6%	2.5%
Japan	467	3,183	9,258	9,174	23,090	0.1%	0.4%	1.2%	1.2%	3.6%

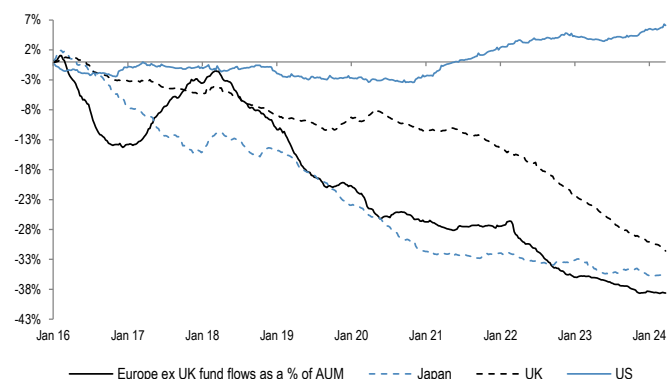
Source: EPFR, as of 20th Mar, 2024

Figure 34: DM Equity Fund flows – last month



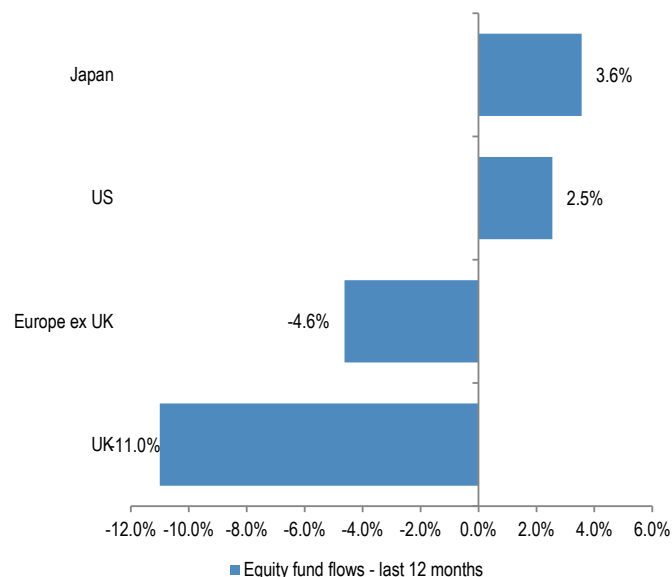
Source: EPFR, Japan includes BoJ purchases.

Figure 36: Cumulative fund flows into regional funds as a percentage of AUM



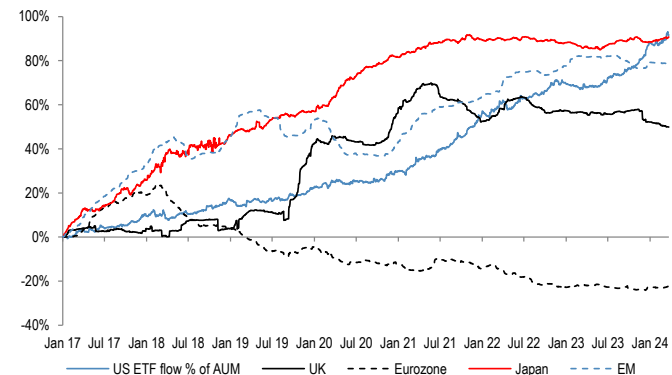
Source: EPFR, as of 20th Mar, 2024. Japan includes Non-ETF purchases only.

Figure 35: DM Equity Fund flows – last 12 months



Source: EPFR, Japan includes BoJ purchases.

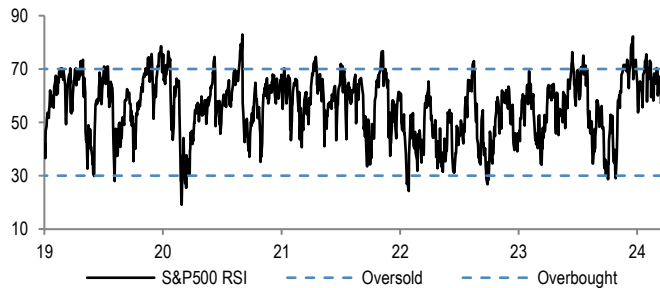
Figure 37: Cumulative fund flows into regional equity ETFs as a percentage of AUM



Source: Bloomberg Finance L.P. *Based on the 25 biggest ETF's with a mandate to invest in that particular region. Japan includes BoJ purchases.

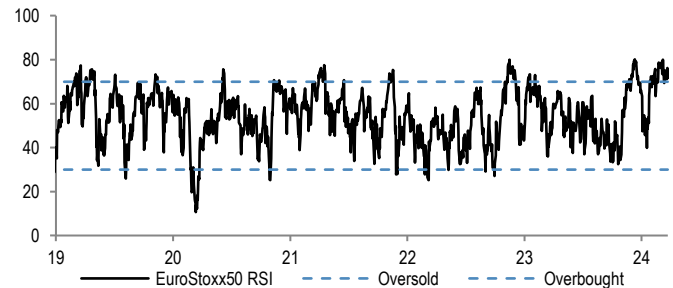
Technical Indicators

Figure 38: S&P500 RSI



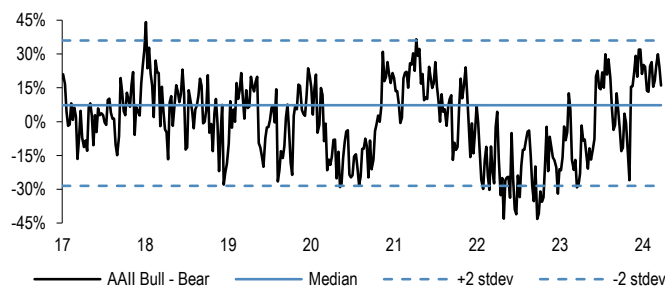
Source: Bloomberg Finance L.P.

Figure 39: EuroStoxx50 RSI



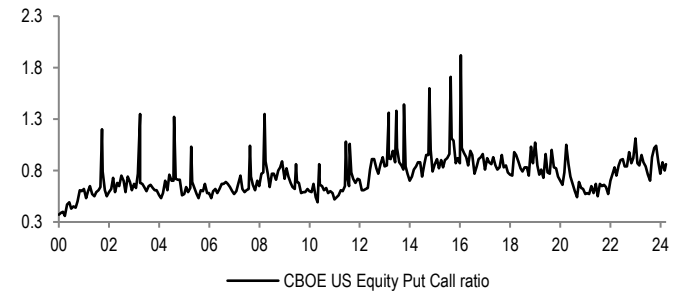
Source: Bloomberg Finance L.P.

Figure 40: AAll Bull-Bear



Source: Bloomberg Finance L.P.

Figure 41: Put-call ratio



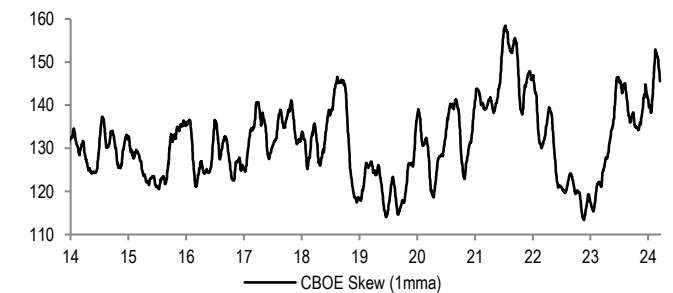
Source: Bloomberg Finance L.P.

Figure 42: Sentix Sentiment Index vs SX5E



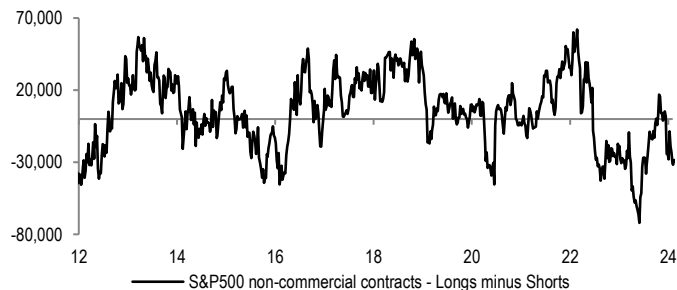
Source: Bloomberg Finance L.P.

Figure 43: Equity Skew



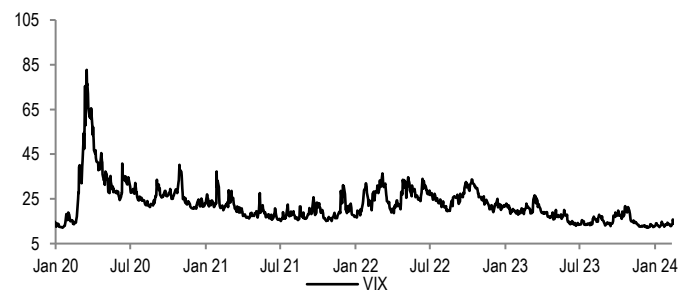
Source: Bloomberg Finance L.P.

Figure 44: Speculative positions in S&P500 futures contracts



Source: Bloomberg Finance L.P.

Figure 45: VIX



Source: Bloomberg Finance L.P.

Performance

Table 16: Sector Index Performances — MSCI Europe

(%change)		Local currency		
Industry Group		4week	12m	YTD
Europe		3.4	13.1	7.1
Energy		4.9	8.3	1.5
Materials		7.0	9.6	3.3
	Chemicals	6.1	13.2	5.8
	Construction Materials	12.8	53.1	23.1
	Metals & Mining	5.2	(10.2)	(8.5)
Industrials		4.8	23.6	10.4
	Capital Goods	6.8	29.1	12.9
	Transport	(7.2)	(9.4)	(10.3)
	Business Svs	(0.3)	15.4	8.6
Consumer Discretionary		2.3	10.4	12.1
	Automobile	4.4	19.7	16.3
	Consumer Durables	0.9	5.2	13.3
	Media	0.8	16.1	7.0
	Retailing	6.6	13.0	6.6
	Hotels, Restaurants & Leisure	0.1	11.1	6.8
Consumer Staples		(2.9)	(8.2)	(2.2)
	Food & Drug Retailing	(0.5)	(3.8)	(4.2)
	Food Beverage & Tobacco	(1.8)	(11.2)	(1.5)
	Household Products	(5.9)	(2.4)	(3.3)
Healthcare		1.6	12.7	7.5
Financials		7.3	21.5	9.7
	Banks	8.9	23.9	10.3
	Diversified Financials	6.5	20.9	7.3
	Insurance	5.4	18.5	11.0
Real Estate		2.7	7.8	(2.9)
Information Technology		3.7	38.4	20.1
	Software and Services	4.6	46.7	19.8
	Technology Hardware	3.3	4.8	2.0
	Semicon & Semicon Equip	3.3	41.3	23.9
Telecommunications Services		(0.0)	(0.9)	2.3
Utilities		1.4	(2.4)	(7.4)

Source: MSCI, Datastream, as at COB 21st Mar, 2024.

Table 17: Country and Region Index Performances

(%change)		Local Currency			US\$		
Country	Index	4week	12m	YTD	4week	12m	YTD
Austria	ATX	2.1	7.9	1.4	2.5	8.8	(0.3)
Belgium	BEL 20	2.5	2.8	2.2	3.0	3.6	0.4
Denmark	KFX	3.5	40.3	17.8	3.9	41.2	15.8
Finland	HEX 20	(0.4)	(8.1)	(2.4)	0.1	(7.3)	(4.0)
France	CAC 40	3.4	15.0	8.4	3.9	16.0	6.6
Germany	DAX	4.7	19.6	8.5	5.1	20.6	6.7
Greece	ASE General	0.8	36.3	10.6	1.2	37.4	8.7
Ireland	ISEQ	3.6	18.2	13.0	4.0	19.2	11.1
Italy	FTSE MIB	6.1	29.3	13.1	6.6	30.4	11.2
Japan	Topix	5.1	44.9	18.2	4.4	26.5	9.9
Netherlands	AEX	2.1	18.9	11.3	2.6	19.9	9.4
Norway	OBX	4.3	7.4	1.4	2.7	6.2	(3.6)
Portugal	BVL GEN	(3.3)	(9.9)	(13.0)	(2.8)	(9.2)	(14.4)
Spain	IBEX 35	7.2	20.1	7.6	7.7	21.1	5.8
Sweden	OMX	5.1	18.9	6.4	3.8	17.6	2.5
Switzerland	SMI	2.8	8.4	5.1	0.8	11.4	(1.6)
United States	S&P 500	3.0	30.9	9.9	3.0	30.9	9.9
United States	NASDAQ	2.2	38.3	9.3	2.2	38.3	9.3
United Kingdom	FTSE 100	2.6	4.6	1.9	2.9	8.6	1.3
EMU	MSCI EMU	3.7	16.1	9.1	4.2	17.1	7.2
Europe	MSCI Europe	3.4	13.1	7.1	3.4	15.0	4.6
Global	MSCI AC World	3.2	27.3	9.5	3.1	26.7	8.4

Source: MSCI, Datastream, as at COB 21st Mar, 2024.

Earnings

Table 18: IBES Consensus EPS Sector Forecasts — MSCI Europe

	EPS Growth (%yoy)			
	2023	2024E	2025E	2026E
Europe	(3.2)	3.3	10.0	9.2
Energy	(31.6)	(4.3)	3.8	8.7
Materials	(39.8)	8.4	11.3	6.3
Chemicals	(38.7)	24.8	18.7	12.1
Construction Materials	12.2	11.0	8.6	8.4
Metals & Mining	(46.2)	(5.5)	3.8	(0.5)
Industrials	1.2	7.4	13.5	11.6
Capital Goods	22.3	11.2	13.5	11.5
Transport	(54.6)	(20.7)	17.7	13.5
Business Svs	3.2	9.0	11.0	11.1
Discretionary	8.4	1.9	10.6	9.3
Automobile	3.8	(4.0)	5.5	6.0
Consumer Durables	(5.7)	5.7	14.4	13.2
Media	(0.0)	9.3	9.8	11.1
Retailing	50.5	14.8	17.0	6.7
Hotels, Restaurants & Leisure	91.2	17.2	21.3	17.1
Staples	2.5	3.0	8.7	7.6
Food & Drug Retailing	5.3	4.1	11.4	7.2
Food Beverage & Tobacco	1.9	2.1	8.5	7.7
Household Products	3.0	5.4	8.0	7.5
Healthcare	3.0	3.9	14.1	11.0
Financials	15.7	5.3	7.9	9.1
Banks	28.5	0.6	4.5	5.9
Diversified Financials	(21.8)	18.4	22.8	24.9
Insurance	13.7	10.8	7.8	7.1
Real Estate	10.5	(1.7)	3.9	4.6
IT	13.9	(5.2)	29.1	15.9
Software and Services	18.5	(0.1)	20.4	14.0
Technology Hardware	(20.7)	9.4	9.0	9.2
Semicon & Semicon Equip	28.0	(12.6)	42.5	18.9
Telecoms	(8.6)	10.4	10.3	8.4
Utilities	0.7	(0.6)	1.0	1.9

Source: IBES, MSCI, Datastream. As at COB 21st Mar, 2024.

Table 19: IBES Consensus EPS Country Forecasts

		EPS growth (%change)			
Country	Index	2023	2024E	2025E	2026E
Austria	ATX	(15.8)	(5.8)	5.0	1.8
Belgium	BEL 20	13.7	(6.5)	11.5	12.5
Denmark	Denmark KFX	(29.9)	20.2	22.3	18.2
Finland	MSCI Finland	(25.1)	4.2	11.5	8.0
France	CAC 40	(2.2)	2.8	8.8	8.3
Germany	DAX	2.2	(0.2)	11.8	10.4
Greece	MSCI Greece	6.7	0.7	3.5	21.9
Ireland	MSCI Ireland	32.5	(1.9)	2.6	6.5
Italy	MSCI Italy	9.7	1.2	2.8	2.6
Netherlands	AEX	(1.0)	(0.4)	13.2	11.2
Norway	MSCI Norway	(40.1)	3.5	6.2	3.0
Portugal	MSCI Portugal	16.9	14.8	5.5	6.1
Spain	IBEX 35	8.4	0.9	4.5	6.8
Sweden	OMX	31.6	0.2	8.4	7.1
Switzerland	SMI	(4.4)	9.5	13.9	10.2
United Kingdom	FTSE 100	(11.2)	1.3	7.9	9.3
EMU	MSCI EMU	4.3	2.6	10.0	8.6
Europe ex UK	MSCI Europe ex UK	1.0	3.9	10.9	9.1
Europe	MSCI Europe	(3.2)	3.3	10.0	9.2
United States	S&P 500	2.2	9.9	13.6	11.6
Japan	Topix	2.9	15.1	9.2	9.3
Emerging Market	MSCI EM	(5.3)	17.5	15.5	11.4
Global	MSCI AC World	0.2	9.0	12.7	10.8

Source: IBES, MSCI, Datastream. As at COB 21st Mar, 2024** Japan refers to the period from March in the year stated to March in the following year – EPS post-goodwill

Valuations

Table 20: IBES Consensus European Sector Valuations

	P/E			Dividend Yield			EV/EBITDA			Price to Book		
	2024e	2025e	2026e	2024e	2025e	2026e	2024e	2025e	2026e	2024e	2025e	2026e
Europe	14.1	12.8	11.8	3.3%	3.5%	3.8%	8.0	7.4	7.0	1.9	1.8	1.7
Energy	7.6	7.4	6.8	5.5%	5.4%	5.6%	3.3	3.3	3.1	1.2	1.1	1.0
Materials	15.9	14.3	13.5	3.1%	3.3%	3.6%	7.4	6.7	6.5	1.7	1.6	1.5
Chemicals	24.3	20.4	18.2	2.6%	2.8%	3.0%	11.3	10.2	9.4	2.5	2.3	2.2
Construction Materials	14.0	12.9	11.9	2.7%	2.9%	3.1%	7.5	7.1	6.5	1.7	1.6	1.5
Metals & Mining	10.0	9.7	9.8	4.2%	4.4%	4.8%	4.7	4.2	4.2	1.2	1.1	1.0
Industrials	19.8	17.4	15.6	2.3%	2.6%	2.8%	10.1	9.0	8.4	3.3	3.1	2.9
Capital Goods	19.8	17.4	15.6	2.2%	2.4%	2.6%	10.5	9.3	8.6	3.5	3.3	3.0
Transport	16.6	14.1	12.4	3.5%	3.7%	3.7%	6.9	6.4	6.0	1.6	1.6	1.5
Business Svs	22.2	20.0	18.0	2.3%	2.5%	2.7%	13.0	11.9	11.0	6.2	5.7	5.1
Discretionary	13.8	12.5	11.7	2.6%	2.9%	3.1%	5.5	4.9	4.7	2.0	1.8	1.5
Automobile	6.5	6.2	6.0	4.8%	5.1%	5.3%	1.9	1.4	1.6	0.8	0.7	0.6
Consumer Durables	24.6	21.5	19.0	1.7%	1.9%	2.1%	14.4	13.0	11.7	4.5	4.0	3.6
Media & Entertainment	16.6	15.1	13.2	2.3%	2.5%	2.7%	11.8	9.7	9.1	1.8	1.8	2.0
Retailing	15.3	13.1	12.3	2.4%	2.6%	2.9%	10.0	9.3	8.1	2.9	2.8	2.2
Hotels, Restaurants & Leisure	23.7	19.5	16.7	2.1%	2.5%	2.8%	12.4	10.6	9.7	4.2	3.8	3.5
Staples	16.6	15.3	14.2	3.2%	3.4%	3.6%	10.7	10.0	9.2	2.8	2.7	2.6
Food & Drug Retailing	11.9	10.7	9.9	4.0%	4.5%	4.8%	6.0	5.6	5.4	1.5	1.5	1.4
Food Beverage & Tobacco	16.3	15.0	13.9	3.5%	3.7%	4.0%	10.5	9.8	9.0	2.6	2.4	2.3
Household Products	19.3	17.9	16.6	2.4%	2.6%	2.8%	13.8	12.8	12.3	4.2	3.9	3.9
Healthcare	17.8	15.6	14.0	2.4%	2.6%	2.8%	12.5	11.0	9.8	3.5	3.2	2.9
Financials	9.2	8.5	7.8	5.5%	5.6%	6.1%	-	-	-	1.1	1.0	0.9
Banks	7.0	6.7	6.4	7.3%	7.3%	7.7%	-	-	-	0.8	0.7	0.7
Diversified Financials	15.2	12.4	10.0	2.3%	2.6%	2.9%	-	-	-	1.4	1.5	1.4
Insurance	10.9	10.1	9.4	5.4%	5.8%	6.2%	-	-	-	1.7	1.6	1.5
Real Estate	14.0	13.5	12.9	4.1%	4.3%	4.6%	-	-	-	0.8	0.8	0.8
IT	31.0	24.0	20.7	1.1%	1.3%	1.4%	18.6	14.7	12.7	5.2	4.7	4.2
Software and Services	31.4	26.1	22.9	1.2%	1.3%	1.4%	19.7	16.1	14.1	4.7	4.3	3.9
Technology Hardware	15.9	14.6	13.3	2.6%	2.6%	2.9%	9.2	8.3	7.0	1.9	1.8	1.6
Semicon & Semicon Equip	36.5	25.6	21.5	0.8%	0.9%	1.1%	22.1	16.2	13.7	8.7	7.3	6.2
Communication Services	13.9	12.6	11.5	4.3%	4.4%	4.6%	6.6	6.1	5.7	1.4	1.3	1.3
Utilities	11.9	11.7	11.5	5.4%	5.6%	5.6%	7.9	8.0	8.2	1.5	1.4	1.4

Source: IBES, MSCI, Datastream. As at COB 21st Mar, 2024.

Table 21: IBES Consensus P/E and 12-Month Forward Dividend Yields — Country Forecasts

Country	Index	P/E				Dividend Yield
		12mth Fwd	2024E	2025E	2026E	12mth Fwd
Austria	ATX	7.7	7.7	7.4	7.0	6.0%
Belgium	BEL 20	15.4	15.8	14.2	12.3	3.0%
Denmark	Denmark KFX	28.4	30.1	24.6	20.8	1.7%
Finland	MSCI Finland	14.4	14.8	13.3	12.3	4.6%
France	CAC 40	13.5	13.8	12.7	11.7	3.2%
Germany	DAX	12.3	12.7	11.4	10.5	3.2%
Greece	MSCI Greece	30.3	30.6	29.6	23.3	1.8%
Ireland	MSCI Ireland	11.1	11.1	10.8	10.2	3.5%
Italy	MSCI Italy	9.2	9.3	9.0	8.8	5.3%
Netherlands	AEX	15.3	15.8	13.9	12.8	2.5%
Norway	MSCI Norway	10.6	10.8	10.2	9.9	6.4%
Portugal	MSCI Portugal	13.4	13.6	12.9	12.1	4.3%
Spain	IBEX 35	11.1	11.2	10.7	10.0	4.7%
Sweden	OMX	15.8	16.1	14.9	14.0	3.6%
Switzerland	SMI	17.4	18.0	15.8	14.3	3.3%
United Kingdom	FTSE 100	11.2	11.4	10.6	9.7	4.1%
EMU	MSCI EMU	13.4	13.8	12.5	11.6	3.3%
Europe ex UK	MSCI Europe ex UK	14.8	15.2	13.7	12.6	3.2%
Europe	MSCI Europe	13.8	14.1	12.8	11.8	3.4%
United States	S&P 500	21.1	21.9	19.3	17.3	1.4%
Japan	Topix	15.4	16.9	15.5	14.2	2.2%
Emerging Market	MSCI EM	12.2	12.6	10.9	9.8	3.0%
Global	MSCI AC World	17.6	18.2	16.3	14.7	2.0%

Source: IBES, MSCI, Datastream. As at COB 21st Mar, 2024; ** Japan refers to the period from March in the year stated to March in the following year – P/E post goodwill.

Economic, Interest Rate and Exchange Rate Outlook

Table 22: Economic Outlook in Summary

	Real GDP % oya			Real GDP % over previous period, saar						Consumer prices % oya			
	2023E	2024E	2025E	3Q23	4Q23	1Q24E	2Q24E	3Q24E	4Q24E	3Q23	1Q24E	3Q24E	1Q25E
United States	2.5	2.3	1.6	4.9	3.2	2.2	1.5	0.8	0.8	3.6	3.1	2.9	2.5
Eurozone	0.5	0.4	1.0	-0.2	-0.2	0.5	0.8	0.8	0.8	5.0	2.6	2.2	2.0
United Kingdom	0.1	0.0	0.1	-0.5	-1.4	1.0	0.8	0.0	-0.5	6.7	3.6	1.7	2.3
Japan	1.9	0.5	0.8	-3.2	0.4	1.0	1.7	1.0	0.8	3.1	2.8	3.6	2.8
Emerging markets	4.2	4.1	3.6	5.8	3.9	4.7	3.6	3.7	3.6	3.8	3.8	3.5	3.5
Global	2.7	2.4	2.3	3.6	2.5	2.6	2.2	2.0	2.0	4.0	3.3	3.0	2.8

Source: J.P. Morgan economic research J.P. Morgan estimates, as of COB 21st Mar, 2024

Table 23: Official Rates Outlook

	Official interest rate	Current	Last change (bp)	Forecast for				
				Forecast next change (bp)	Mar 24	Jun 24	Sep 24	Dec 24
United States	Federal funds rate	5.50	26 Jul 23 (+25bp)	Jun 24 (-25bp)	5.50	5.25	5.00	4.75
Eurozone	Depo rate	4.00	14 Sep 23 (+25bp)	Jun 24 (-25bp)	4.00	3.75	3.50	3.00
United Kingdom	Bank Rate	5.25	03 Aug 23 (+25bp)	Aug 24 (-25bp)	5.25	5.25	5.00	4.50
Japan	Pol rate IOER	0.10	19 Mar 24 (+20bp)	3Q24 (+15bp)	0.10	0.10	0.25	0.50

Source: J.P. Morgan estimates, Datastream, as of COB 21st Mar, 2024

Table 24: 10-Year Government Bond Yield Forecasts

10 Yr Govt BY	Forecast for end of				
	22-Mar-24	Jun 24	Sep 24	Dec 24	Mar 25
US	4.24	4.15	4.05	4.00	3.90
Euro Area	2.37	2.20	2.05	1.90	1.80
United Kingdom	3.95	4.05	3.95	3.80	3.65
Japan	0.74	0.75	0.85	1.05	1.05

Source: J.P. Morgan estimates, Datastream, forecasts as of COB 15th Mar, 2024

Table 25: Exchange Rate Forecasts vs. US Dollar

Exchange rates vs US\$	Forecast for end of				
	21-Mar-24	Jun 24	Sep 24	Dec 24	Mar 25
EUR	1.09	1.05	1.05	1.09	1.12
GBP	1.27	1.22	1.22	1.25	1.29
CHF	0.90	0.92	0.91	0.89	0.87
JPY	152	148	146	144	142
DXV	104.0	106.3	106.0	102.8	100.2

Source: J.P. Morgan estimates, Datastream, forecasts as of COB 15th Mar, 2024

Sector, Regional and Asset Class Allocations

Table 26: J.P. Morgan Equity Strategy — European Sector Allocation

	MSCI Europe Weights	Allocation	Deviation	Recommendation
Energy	5.6%	8.0%	2.4%	OW
Materials	7.0%	6.0%	-1.0%	N
				UW
				N
				N
Industrials	15.8%	14.0%	-1.8%	N
				UW
				OW
				N
				N
Consumer Discretionary	9.1%	7.0%	-2.1%	UW
				UW
				N
				UW
				UW
Consumer Staples	11.7%	13.0%	1.3%	OW
				UW
				OW
				OW
				OW
Healthcare	16.0%	18.0%	2.0%	OW
Financials	18.1%	14.0%	-4.1%	UW
				UW
				N
Real Estate	0.9%	2.0%	1.1%	OW
Information Technology	7.1%	7.0%	-0.1%	N
				N
				N
				UW
Communication Services	4.5%	5.0%	0.5%	OW
				OW
				N
Utilities	4.4%	6.0%	1.6%	OW
	100.0%	100.0%	0.0%	Balanced

Source: MSCI, Datastream, J.P. Morgan.

Table 27: J.P. Morgan Equity Strategy — Global Regional Allocation

	MSCI Weight	Allocation	Deviation	Recommendation
EM	10.0%	10.0%	0.0%	Neutral
DM	90.0%	90.0%	0.0%	Neutral
US	70.9%	68.0%	-2.9%	Neutral
Japan	6.2%	8.0%	1.8%	Overweight
Eurozone	8.6%	8.0%	-0.6%	Neutral
UK	3.8%	6.0%	2.2%	Overweight
Others*	10.5%	10.0%	-0.5%	Neutral
	100.0%	100.0%	0.0%	Balanced

Source: MSCI, J.P. Morgan *Other includes Denmark, Switzerland, Australia, Canada, Hong Kong SAR, Sweden, Singapore, New Zealand, Israel and Norway

Table 28: J.P. Morgan Equity Strategy — European Regional Allocation

	MSCI Weight	Allocation	Deviation	Recommendation
Eurozone	51.0%	48.0%	-3.0%	Neutral
United Kingdom	22.6%	25.0%	2.4%	Overweight
Others**	26.5%	27.0%	0.5%	Overweight
	100.0%	100.0%		Balanced

Source: MSCI, J.P. Morgan **Other includes Denmark, Switzerland, Sweden and Norway

Table 29: J.P. Morgan Equity Strategy — Asset Class Allocation

	Benchmark weighting	Allocation	Deviation	Recommendation
Equities	60%	55%	-5%	Underweight
Bonds	30%	35%	5%	Overweight
Cash	10%	10%	0%	Neutral
	100%	100%	0%	Balanced

Source: MSCI, J.P. Morgan



Click [here](#) for our weekly podcast

Anamil Kochar (anamil.kochar@jpmchase.com) of J.P. Morgan India Private Limited is a co-author of this report.

Companies Discussed in This Report (all prices in this report as of market close on 22 March 2024, unless otherwise indicated) BNP Paribas(BNPP.PA/€62.80/N), Bank Of Ireland Group PLC(BIRG.I/€9.10/UW), Credit Agricole(CAGR.PA/€13.40/UW), Handelsbanken(SHBa.ST/Skr109.20/UW), Lloyds Banking Group(LLOY.L/52p/UW), Nordea Bank Abp(NDASE.ST/Skr119.08/UW)

Analyst Certification: The Research Analyst(s) denoted by an “AC” on the cover of this report certifies (or, where multiple Research Analysts are primarily responsible for this report, the Research Analyst denoted by an “AC” on the cover or within the document individually certifies, with respect to each security or issuer that the Research Analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect the Research Analyst’s personal views about any and all of the subject securities or issuers; and (2) no part of any of the Research Analyst’s compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the Research Analyst(s) in this report. For all Korea-based Research Analysts listed on the front cover, if applicable, they also certify, as per KOFIA requirements, that the Research Analyst’s analysis was made in good faith and that the views reflect the Research Analyst’s own opinion, without undue influence or intervention.

All authors named within this report are Research Analysts who produce independent research unless otherwise specified. In Europe, Sector Specialists (Sales and Trading) may be shown on this report as contacts but are not authors of the report or part of the Research Department.

Important Disclosures

Company-Specific Disclosures: Important disclosures, including price charts and credit opinion history tables, are available for compendium reports and all J.P. Morgan–covered companies, and certain non-covered companies, by visiting <https://www.jpmm.com/research/disclosures>, calling 1-800-477-0406, or e-mailing research.disclosure.inquiries@jpmorgan.com with your request.

Explanation of Equity Research Ratings, Designations and Analyst(s) Coverage Universe:

J.P. Morgan uses the following rating system: Overweight (over the duration of the price target indicated in this report, we expect this stock will outperform the average total return of the stocks in the Research Analyst’s, or the Research Analyst’s team’s, coverage universe); Neutral (over the duration of the price target indicated in this report, we expect this stock will perform in line with the average total return of the stocks in the Research Analyst’s, or the Research Analyst’s team’s, coverage universe); and Underweight (over the duration of the price target indicated in this report, we expect this stock will underperform the average total return of the stocks in the Research Analyst’s, or the Research Analyst’s team’s, coverage universe. NR is Not Rated. In this case, J.P. Morgan has removed the rating and, if applicable, the price target, for this stock because of either a lack of a sufficient fundamental basis or for legal, regulatory or policy reasons. The previous rating and, if applicable, the price target, no longer should be relied upon. An NR designation is not a recommendation or a rating. In our Asia (ex-Australia and ex-India) and U.K. small- and mid-cap Equity Research, each stock’s expected total return is compared to the expected total return of a benchmark country market index, not to those Research Analysts’ coverage universe. If it does not appear in the Important Disclosures section of this report, the certifying Research Analyst’s coverage universe can be found on J.P. Morgan’s Research website, <https://www.jpmorganmarkets.com>.

J.P. Morgan Equity Research Ratings Distribution, as of January 01, 2024

	Overweight (buy)	Neutral (hold)	Underweight (sell)
J.P. Morgan Global Equity Research Coverage*	47%	39%	13%
IB clients**	48%	43%	32%
JPMS Equity Research Coverage*	46%	42%	12%
IB clients**	68%	63%	46%

*Please note that the percentages may not add to 100% because of rounding.

**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.

For purposes of FINRA ratings distribution rules only, 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.

Equity Valuation and Risks: For valuation methodology and risks associated with covered companies or price targets for covered companies, please see the most recent company-specific research report at <http://www.jpmorganmarkets.com>, contact the primary analyst or your J.P. Morgan representative, or email research.disclosure.inquiries@jpmorgan.com. For material information about the proprietary 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.

A history of J.P. Morgan investment recommendations disseminated during the preceding 12 months can be accessed on the Research & Commentary page of <http://www.jpmorganmarkets.com> where you can also search by analyst name, sector or financial instrument.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Registration of non-US Analysts: Unless otherwise noted, the non-US analysts listed on the front of this report are employees of non-US affiliates of J.P. Morgan Securities LLC, may not be registered as research analysts under FINRA rules, may not be associated persons of J.P. Morgan Securities LLC, and may not be subject to FINRA Rule 2241 or 2242 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Other Disclosures

J.P. Morgan is a marketing name for investment banking businesses of JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide.

UK MIFID FICC research unbundling exemption: UK clients should refer to [UK MIFID Research Unbundling exemption](#) for details of J.P. Morgan's implementation of the FICC research exemption and guidance on relevant FICC research categorisation.

All research material made available to clients are simultaneously available on our client website, J.P. Morgan Markets, unless specifically permitted by relevant laws. Not all research content is redistributed, e-mailed or made available to third-party aggregators. For all research material available on a particular stock, please contact your sales representative.

Any long form nomenclature for references to China; Hong Kong; Taiwan; and Macau within this research material are Mainland China; Hong Kong SAR (China); Taiwan (China); and Macau SAR (China).

J.P. Morgan Research may, from time to time, write on issuers or securities targeted by economic or financial sanctions imposed or administered by the governmental authorities of the U.S., EU, UK or other relevant jurisdictions (Sanctioned Securities). Nothing in this report is intended to be read or construed as encouraging, facilitating, promoting or otherwise approving investment or dealing in such Sanctioned Securities. Clients should be aware of their own legal and compliance obligations when making investment decisions.

Any digital or crypto assets discussed in this research report are subject to a rapidly changing regulatory landscape. For relevant regulatory advisories on crypto assets, including bitcoin and ether, please see <https://www.jpmorgan.com/disclosures/cryptoasset-disclosure>.

The author(s) of this research report may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so.

Exchange-Traded Funds (ETFs): J.P. Morgan Securities LLC ("JPMS") acts as authorized participant for substantially all U.S.-listed ETFs. To the extent that any ETFs are mentioned in this report, JPMS may earn commissions and transaction-based compensation in connection with the distribution of those ETF shares and may earn fees for performing other trade-related services, such as securities lending to short sellers of the ETF shares. JPMS may also perform services for the ETFs themselves, including acting as a broker or dealer to the ETFs. In addition, affiliates of JPMS may perform services for the ETFs, including trust, custodial, administration, lending, index calculation and/or maintenance and other services.

Options and Futures related research: If the information contained herein regards options- or futures-related research, such information is available only to persons who have received the proper options or futures risk disclosure documents. Please contact your J.P. Morgan Representative or visit <https://www.theocc.com/components/docs/riskstoc.pdf> for a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options or http://www.finra.org/sites/default/files/Security_Futures_Risk_Disclosure_Statement_2018.pdf for a copy of the Security Futures Risk Disclosure Statement.

Changes to Interbank Offered Rates (IBORs) and other benchmark rates: Certain interest rate benchmarks are, or may in the future become, subject to ongoing international, national and other regulatory guidance, reform and proposals for reform. For more information, please consult: https://www.jpmorgan.com/global/disclosures/interbank_offered_rates

Private Bank Clients: Where you are receiving research as a client of the private banking businesses offered by JPMorgan Chase & Co. and its subsidiaries ("J.P. Morgan Private Bank"), research is provided to you by J.P. Morgan Private Bank and not by any other division of J.P. Morgan, including, but not limited to, the J.P. Morgan Corporate and Investment Bank and its Global Research division.

Legal entity responsible for the production and distribution of research: The legal entity identified below the name of the Reg AC Research Analyst who authored this material is the legal entity responsible for the production of this research. Where multiple Reg AC Research Analysts authored this material with different legal entities identified below their names, these legal entities are jointly responsible for the production of this research. Research Analysts from various J.P. Morgan affiliates may have contributed to the production of this material but may not be licensed to carry out regulated activities in your jurisdiction (and do not hold themselves out as being able to do so). Unless otherwise stated below, this material has been distributed by the legal entity responsible for production. If you have any queries, please contact the relevant Research Analyst in your jurisdiction or the entity in your jurisdiction that has distributed this research material.

Legal Entities Disclosures and Country-/Region-Specific Disclosures:

Argentina: JPMorgan Chase Bank N.A Sucursal Buenos Aires is regulated by Banco Central de la República Argentina ("BCRA" - Central Bank of Argentina) and Comisión Nacional de Valores ("CNV" - Argentinian Securities Commission - ALYC y AN Integral N°51). **Australia:** J.P. Morgan Securities Australia Limited ("JPMSAL") (ABN 61 003 245 234/AFS Licence No: 238066) is regulated by the Australian Securities and Investments Commission and is a Market Participant of ASX Limited, a Clearing and Settlement Participant of ASX Clear Pty Limited and a Clearing Participant of ASX Clear (Futures) Pty Limited. This material is issued and distributed in Australia by or on behalf of

JPMSAL only to "wholesale clients" (as defined in section 761G of the Corporations Act 2001). A list of all financial products covered can be found by visiting <https://www.jpmm.com/research/disclosures>. J.P. Morgan seeks to cover companies of relevance to the domestic and international investor base across all Global Industry Classification Standard (GICS) sectors, as well as across a range of market capitalisation sizes. If applicable, in the course of conducting public side due diligence on the subject company(ies), the Research Analyst team may at times perform such diligence through corporate engagements such as site visits, discussions with company representatives, management presentations, etc. Research issued by JPMSAL has been prepared in accordance with J.P. Morgan Australia's Research Independence Policy which can be found at the following link: [J.P. Morgan Australia - Research Independence Policy](#). **Brazil:** Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. Ombudsman J.P. Morgan: 0800-7700847 / 0800-7700810 (For Hearing Impaired) / ouvidoria.jp.morgan@jpmorgan.com. **Canada:** J.P. Morgan Securities Canada Inc. is a registered investment dealer, regulated by the Canadian Investment Regulatory Organization and the Ontario Securities Commission and is the participating member on Canadian exchanges. This material is distributed in Canada by or on behalf of J.P.Morgan Securities Canada Inc. **Chile:** Inversiones J.P. Morgan Limitada is an unregulated entity incorporated in Chile. **China:** J.P. Morgan Securities (China) Company Limited has been approved by CSRC to conduct the securities investment consultancy business. **Dubai International Financial Centre (DIFC):** JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre - The Gate, West Wing, Level 3 and 9 PO Box 506551, Dubai, UAE. This material has been distributed by JP Morgan Chase Bank, N.A., Dubai Branch to persons regarded as professional clients or market counterparties as defined under the DFSA rules. **European Economic Area (EEA):** Unless specified to the contrary, research is distributed in the EEA by J.P. Morgan SE ("JPM SE"), which is authorised as a credit institution by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and jointly supervised by the BaFin, the German Central Bank (Deutsche Bundesbank) and the European Central Bank (ECB). JPM SE is a company headquartered in Frankfurt with registered address at TaunusTurm, Taunustor 1, Frankfurt am Main, 60310, Germany. The material has been distributed in the EEA to persons regarded as professional investors (or equivalent) pursuant to Art. 4 para. 1 no. 10 and Annex II of MiFID II and its respective implementation in their home jurisdictions ("EEA professional investors"). This material must not be acted on or relied on by persons who are not EEA professional investors. Any investment or investment activity to which this material relates is only available to EEA relevant persons and will be engaged in only with EEA relevant persons. **Hong Kong:** J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong, and J.P. Morgan Broking (Hong Kong) Limited (CE number AAB027) is regulated by the Securities and Futures Commission in Hong Kong. JP Morgan Chase Bank, N.A., Hong Kong Branch (CE Number AAL996) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission, is organized under the laws of the United States with limited liability. Where the distribution of this material is a regulated activity in Hong Kong, the material is distributed in Hong Kong by or through J.P. Morgan Securities (Asia Pacific) Limited and/or J.P. Morgan Broking (Hong Kong) Limited. **India:** J.P. Morgan India Private Limited (Corporate Identity Number - U67120MH1992FTC068724), having its registered office at J.P. Morgan Tower, Off. C.S.T. Road, Kalina, Santacruz - East, Mumbai - 400098, is registered with the Securities and Exchange Board of India (SEBI) as a 'Research Analyst' having registration number INH000001873. J.P. Morgan India Private Limited is also registered with SEBI as a member of the National Stock Exchange of India Limited and the Bombay Stock Exchange Limited (SEBI Registration Number - INZ000239730) and as a Merchant Banker (SEBI Registration Number - MB/INM000002970). Telephone: 91-22-6157 3000, Facsimile: 91-22-6157 3990 and Website: <http://www.jpimpl.com>. JPMorgan Chase Bank, N.A. - Mumbai Branch is licensed by the Reserve Bank of India (RBI) (Licence No. 53/ Licence No. BY.4/94; SEBI - IN/CUS/014/ CDSL : IN-DP-CDSL-444-2008/ IN-DP-NSDL-285-2008/ INBI00000984/ INE231311239) as a Scheduled Commercial Bank in India, which is its primary license allowing it to carry on Banking business in India and other activities, which a Bank branch in India are permitted to undertake. For non-local research material, this material is not distributed in India by J.P. Morgan India Private Limited. Compliance Officer: Spurthi Gadamsetty; spurthi.gadamsetty@jpmchase.com; +912261573225. Grievance Officer: Ramprasadh K, jpimpl.research.feedback@jpmorgan.com; +912261573000.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Indonesia: PT J.P. Morgan Sekuritas Indonesia is a member of the Indonesia Stock Exchange and is registered and supervised by the Otoritas Jasa Keuangan (OJK). **Korea:** J.P. Morgan Securities (Far East) Limited, Seoul Branch, is a member of the Korea Exchange (KRX). JPMorgan Chase Bank, N.A., Seoul Branch, is licensed as a branch office of foreign bank (JPMorgan Chase Bank, N.A.) in Korea. Both entities are regulated by the Financial Services Commission (FSC) and the Financial Supervisory Service (FSS). For non-macro research material, the material is distributed in Korea by or through J.P. Morgan Securities (Far East) Limited, Seoul Branch. **Japan:** JPMorgan Securities Japan Co., Ltd. and JPMorgan Chase Bank, N.A., Tokyo Branch are regulated by the Financial Services Agency in Japan. **Malaysia:** This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X), which is a Participating Organization of Bursa Malaysia Berhad and holds a Capital Markets Services License issued by the Securities Commission in Malaysia. **Mexico:** J.P. Morgan Casa de Bolsa, S.A. de C.V. and J.P. Morgan Grupo Financiero are members of the Mexican Stock Exchange and are authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. **New Zealand:** This material is issued and distributed by JPMSAL in New Zealand only to "wholesale clients" (as defined in the Financial Markets Conduct Act 2013). JPMSAL is registered as a Financial Service Provider under the Financial Service providers (Registration and Dispute Resolution) Act of 2008. **Philippines:** J.P. Morgan Securities Philippines Inc. is a Trading Participant of the Philippine Stock Exchange and a member of the Securities Clearing Corporation of the Philippines and the Securities Investor Protection Fund. It is regulated by the Securities and Exchange Commission. **Singapore:** This material is issued and distributed in Singapore by or through J.P. Morgan Securities Singapore Private Limited (JPMSS) [MCI (P) 030/08/2023 and Co. Reg. No.: 199405335R], which is a member of the Singapore Exchange Securities Trading Limited, and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore), both of which are regulated by the Monetary Authority of Singapore. This material is issued and distributed in Singapore only to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act, Cap. 289 (SFA).

This material is not intended to be issued or distributed to any retail investors or any other investors that do not fall into the classes of “accredited investors,” “expert investors” or “institutional investors,” as defined under Section 4A of the SFA. Recipients of this material in Singapore are to contact JPMSS or JPMCB Singapore in respect of any matters arising from, or in connection with, the material. **South Africa:** J.P. Morgan Equities South Africa Proprietary Limited and JPMorgan Chase Bank, N.A., Johannesburg Branch are members of the Johannesburg Securities Exchange and are regulated by the Financial Services Conduct Authority (FSCA). **Taiwan:** J.P. Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. Material relating to equity securities is issued and distributed in Taiwan by J.P. Morgan Securities (Taiwan) Limited, subject to the license scope and the applicable laws and the regulations in Taiwan. According to Paragraph 2, Article 7-1 of Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers (as amended or supplemented) and/or other applicable laws or regulations, please note that the recipient of this material is not permitted to engage in any activities in connection with the material that may give rise to conflicts of interests, unless otherwise disclosed in the “Important Disclosures” in this material. **Thailand:** This material is issued and distributed in Thailand by JPMorgan Securities (Thailand) Ltd., which is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission, and its registered address is 3rd Floor, 20 North Sathorn Road, Silom, Bangrak, Bangkok 10500. **UK:** Unless specified to the contrary, research is distributed in the UK by J.P. Morgan Securities plc (“JPMS plc”) which is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. JPMS plc is registered in England & Wales No. 2711006, Registered Office 25 Bank Street, London, E14 5JP. This material is directed in the UK only to: (a) persons having professional experience in matters relating to investments falling within article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) (Order) 2005 (“the FPO”); (b) persons outlined in article 49 of the FPO (high net worth companies, unincorporated associations or partnerships, the trustees of high value trusts, etc.); or (c) any persons to whom this communication may otherwise lawfully be made; all such persons being referred to as “UK relevant persons”. This material must not be acted on or relied on by persons who are not UK relevant persons. Any investment or investment activity to which this material relates is only available to UK relevant persons and will be engaged in only with UK relevant persons. Research issued by JPMS plc has been prepared in accordance with JPMS plc's policy for prevention and avoidance of conflicts of interest related to the production of Research which can be found at the following link: [J.P. Morgan EMEA - Research Independence Policy](#). **U.S.:** J.P. Morgan Securities LLC (“JPMS”) is a member of the NYSE, FINRA, SIPC, and the NFA. JPMorgan Chase Bank, N.A. is a member of the FDIC. Material published by non-U.S. affiliates is distributed in the U.S. by JPMS who accepts responsibility for its content.

General: Additional information is available upon request. The information in this material has been obtained from sources believed to be reliable. While all reasonable care has been taken to ensure that the facts stated in this material are accurate and that the forecasts, opinions and expectations contained herein are fair and reasonable, JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) make no representations or warranties whatsoever to the completeness or accuracy of the material provided, except with respect to any disclosures relative to J.P. Morgan and the Research Analyst's involvement with the issuer that is the subject of the material. Accordingly, no reliance should be placed on the accuracy, fairness or completeness of the information contained in this material. There may be certain discrepancies with data and/or limited content in this material as a result of calculations, adjustments, translations to different languages, and/or local regulatory restrictions, as applicable. These discrepancies should not impact the overall investment analysis, views and/or recommendations of the subject company(ies) that may be discussed in the material. J.P. Morgan accepts no liability whatsoever for any loss arising from any use of this material or its contents, and neither J.P. Morgan nor any of its respective directors, officers or employees, shall be in any way responsible for the contents hereof, apart from the liabilities and responsibilities that may be imposed on them by the relevant regulatory authority in the jurisdiction in question, or the regulatory regime thereunder. Opinions, forecasts or projections contained in this material represent J.P. Morgan's current opinions or judgment as of the date of the material only and are therefore subject to change without notice. Periodic updates may be provided on companies/industries based on company-specific developments or announcements, market conditions or any other publicly available information. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or projections, which represent only one possible outcome. Furthermore, such opinions, forecasts or projections are subject to certain risks, uncertainties and assumptions that have not been verified, and future actual results or events could differ materially. The value of, or income from, any investments referred to in this material may fluctuate and/or be affected by changes in exchange rates. All pricing is indicative as of the close of market for the securities discussed, unless otherwise stated. Past performance is not indicative of future results. Accordingly, investors may receive back less than originally invested. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. This material may include views on structured securities, options, futures and other derivatives. These are complex instruments, may involve a high degree of risk and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. The recipients of this material must make their own independent decisions regarding any securities or financial instruments mentioned herein and should seek advice from such independent financial, legal, tax or other adviser as they deem necessary. J.P. Morgan may trade as a principal on the basis of the Research Analysts' views and research, and it may also engage in transactions for its own account or for its clients' accounts in a manner inconsistent with the views taken in this material, and J.P. Morgan is under no obligation to ensure that such other communication is brought to the attention of any recipient of this material. Others within J.P. Morgan, including Strategists, Sales staff and other Research Analysts, may take views that are inconsistent with those taken in this material. Employees of J.P. Morgan not involved in the preparation of this material may have investments in the securities (or derivatives of such securities) mentioned in this material and may trade them in ways different from those discussed in this material. This material is not an advertisement for or marketing of any issuer, its products or services, or its securities in any jurisdiction.

Confidentiality and Security Notice: This transmission may contain information that is privileged, confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying,

distribution, or use of the information contained herein (including any reliance thereon) is STRICTLY PROHIBITED. Although this transmission and any attachments are believed to be free of any virus or other defect that might affect any computer system into which it is received and opened, it is the responsibility of the recipient to ensure that it is virus free and no responsibility is accepted by JPMorgan Chase & Co., its subsidiaries and affiliates, as applicable, for any loss or damage arising in any way from its use. If you received this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy format. This message is subject to electronic monitoring: <https://www.jpmorgan.com/disclosures/email>

MSCI: Certain information herein ("Information") is reproduced by permission of MSCI Inc., its affiliates and information providers ("MSCI") ©2024. No reproduction or dissemination of the Information is permitted without an appropriate license. MSCI MAKES NO EXPRESS OR IMPLIED WARRANTIES (INCLUDING MERCHANTABILITY OR FITNESS) AS TO THE INFORMATION AND DISCLAIMS ALL LIABILITY TO THE EXTENT PERMITTED BY LAW. No Information constitutes investment advice, except for any applicable Information from MSCI ESG Research. Subject also to [msci.com/disclaimer](https://www.msci.com/disclaimer)

©2024 Sustainalytics. All Rights Reserved. The information, data, analyses and opinions contained herein: (1) includes the proprietary information of Sustainalytics; (2) may not be copied or redistributed except as specifically authorized; (3) do not constitute investment advice nor an endorsement of any product or project; (4) are provided solely for informational purposes; and (5) are not warranted to be complete, accurate or timely. Sustainalytics is not responsible for any trading decisions, damages or other losses related to it or its use. The use of the data is subject to conditions available at <https://www.sustainalytics.com/legal-disclaimers>.

"Other Disclosures" last revised March 09, 2024.

Copyright 2024 JPMorgan Chase & Co. All rights reserved. This material or any portion hereof may not be reprinted, sold or redistributed without the written consent of J.P. Morgan. It is strictly prohibited to use or share without prior written consent from J.P. Morgan any research material received from J.P. Morgan or an authorized third-party ("J.P. Morgan Data") in any third-party artificial intelligence ("AI") systems or models when such J.P. Morgan Data is accessible by a third-party. It is permissible to use J.P. Morgan Data for internal business purposes only in an AI system or model that protects the confidentiality of J.P. Morgan Data so as to prevent any and all access to or use of such J.P. Morgan Data by any third-party.

Completed 24 Mar 2024 11:06 PM GMT

Disseminated 25 Mar 2024 03:00 AM GMT