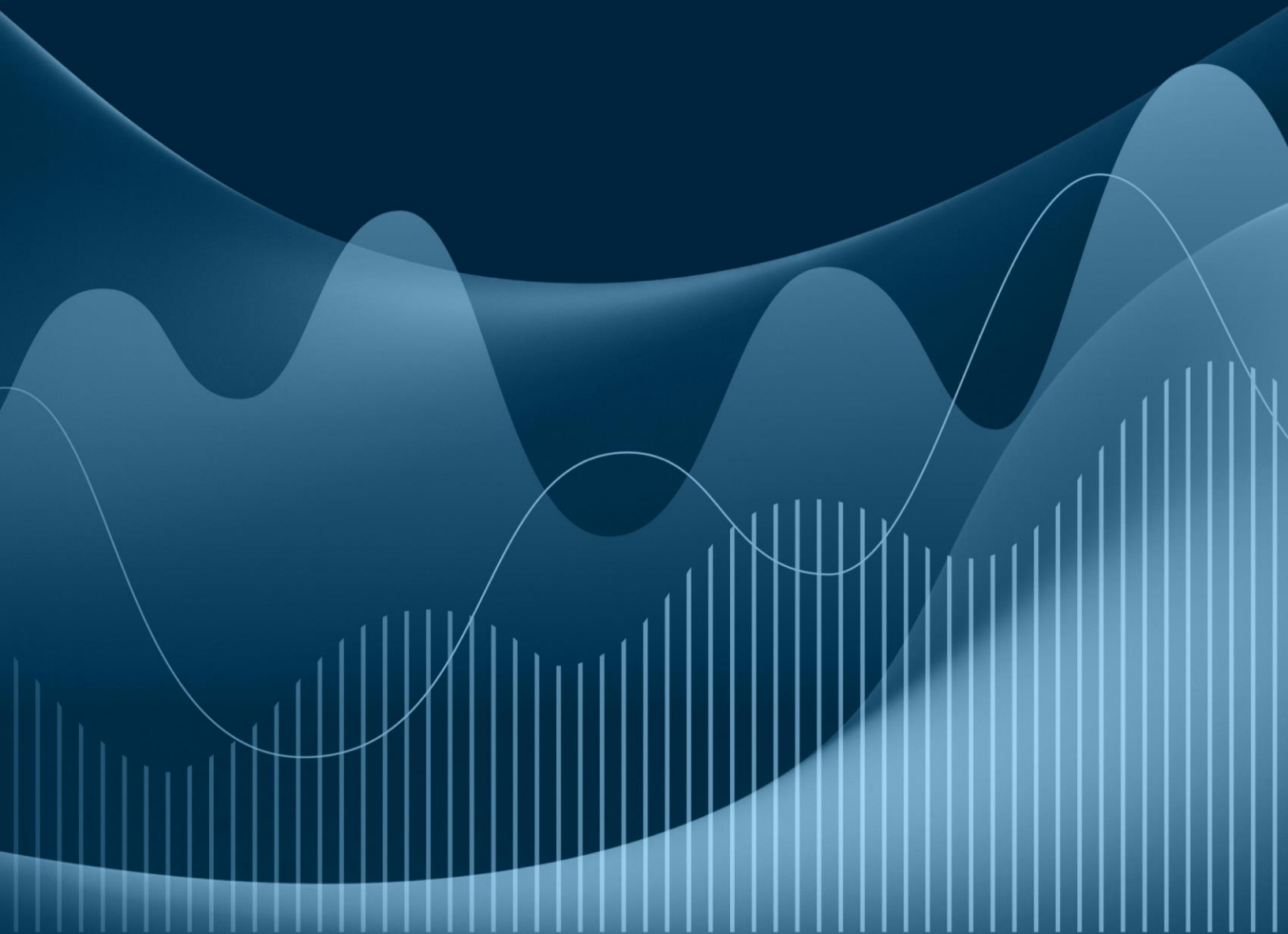


iFlow

MACRO INVESTOR TRENDS

January 2024



2024 KEY RISK THEMES

WHERE ARE
US 10Y
BONDS
GOING?

Go to
page 3

UKRAINE/
ISRAEL:
ONGOING
WAR OR
PEACE?

Go to
page 6

ECB EASING
WHAT DOES
IT MEAN FOR
EURUSD?

Go to
page 7

CHINA GDP
GROWTH IN
2024 IS IT 3%
OR 5%?

Go to
page 9

WHERE IS
USDJPY
GOING IN
2024?

Go to
page 10

Special Edition

NAVIGATING 2024 WITH IFLOW

KEY POLICY, POLITICAL AND ECONOMIC RISKS

We see scant room for smooth outcomes in 2024. The risks financial markets face have become bimodal and binary. Investor views, whether bullish or bearish, are deep-seated. iFlow data indicates significant positioning short the US dollar, short equities, and long bonds. Economic data will play a big role in how those various exposures perform.

Highlighted in the panel above are five hot-button issues that have dominated our discussions with investors over the last quarter: Where are Treasury yields going?; What are the risks to financial markets from Russia-Ukraine and Israel-Hamas conflicts?; When does the European Central Bank ease and what does that mean for the euro?; Can China succeed in boosting growth?; When does the Bank of Japan tighten monetary policy and what will that mean for the yen?

We include with our answers to the markets-based questions perspective from iFlow data, as well as views on positioning and where we stand vis-à-vis market consensus.

In addition to the topics highlighted in the panel, we also discuss the Federal Reserve's quantitative tightening and how developments in US politics could affect markets. EU elections add another source of potential risk, so we have included the expertise contributed by a colleague.

Concerns about a US recession for most of 2023 carry into 2024. Potential domestic headwinds for US growth include the lagged effect of the Fed's rate hikes, tighter credit conditions, fiscal policy in a divided Congress and regulations. External factors such as growth in the rest of the world also matter for US growth. Two wars and other potential flashpoints will keep investors on guard for geopolitical risks the world over.

In our view, scarce optimism makes the 'wall of worry' easier to climb. We see upside risk to growth and risk-asset valuations in 2024.

We look forward to helping you navigate through the coming year, and beyond.

US

APAC

EMEA

10-YEAR TREASURY YIELD AT END-2024: 3.5% OR 5.0%?

Market Consensus: 4.0%

Our View: 5%, risk of higher; bear and/or bull steepening

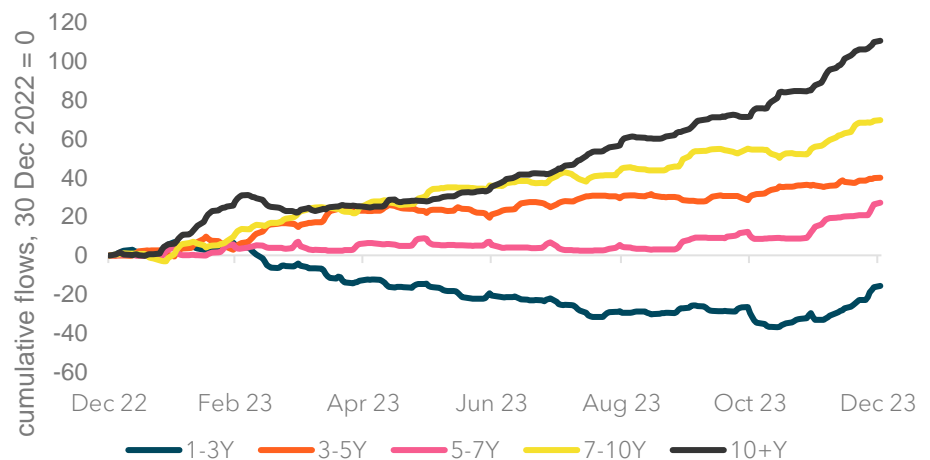
- Concerns over coupon supply and stronger-than-expected economic growth to halt rally in Treasury prices and push yields higher
- iFlow: long duration trade ebbs, real money now buying across the curve
- Both bear and bull steepening will un-invert the curve

We think upward pressure on 10y Treasury yields will persist, with a 5% handle likely this year. Although the Federal Reserve appears done with rate hikes, we see supply issues continuing to dominate, along with economic growth staying buoyant. The chart below shows that our investor base had been shunning short maturities in favor of long duration plays until very recently, when market consensus crystalized around early-2024 rate cuts.

US BOND FLOWS BY DURATION

SOURCE: BNY MELLON IFLOW

EXHIBIT 1: UST FLOWS BY MATURITY



Given our view for higher long-end Treasury yields, we see the curve re-steepening and re-establishing its normal upwards slope. We also see a resumption of bear steepening in 2024 - even with an FOMC that we think will begin cutting rates as early as March. Relatedly, at the short end of the curve, we see 2y yields declining further, adding a bull steepener into the mix, ultimately resulting in an upward-sloping yield curve.

The deciding factors may be actual slowing of the US economy and how the FOMC fares in its quest to get inflation to its 2.0% target.

US

APAC

EMEA

FEDERAL RESERVE: WHAT HAPPENS WITH THE QT PROGRAM?

Market Consensus: QT tapers by 2H 2023

Our View: QT to be reined in; liquidity to become challenging

- We expect the pace of the Fed’s QT to slow at some point in H2
- Liquidity will become scarcer as usage of the Fed’s RRP continues to decline
- Ructions in repo markets at the end of 2023 suggest that some participants are already approaching reserve scarcity

We initially expected the Federal Reserve’s quantitative tightening program to continue apace well into 2024. However, short-lived tempests in money markets at end-November and end-December last year suggested that at least some market participants were approaching liquidity constraints. Reducing the pace of runoff from the Fed’s balance sheet unexpectedly appeared in the December FOMC meeting minutes released Jan. 3. The issue was also addressed more directly by Dallas Fed President Logan in a Jan. 6 speech.

Continued shrinkage in the Fed’s reverse repo facility (RRP) means that excess liquidity that had been parked there is ebbing, quickly. We see take-up dipping below \$500bn by March and below \$200bn by May. This could eventually pressure bank reserves, which, now comfortably above \$3trn, are widely considered abundant. The Fed won’t know at which level below that quantity reserve would become merely “ample” and so require a reduction in the pace of QT. Furthermore, there are distributional considerations. While aggregate reserves are abundant, the distribution of them among banks might be uneven - leading at least some banks to reach their own lowest comfortable level of reserves sooner, so requiring some slowing in the pace of balance sheet runoff.

EXHIBIT 2: SHORT DURATION AND CASH FLOWS



SOURCE: BNY MELLON IFLOW

US

APAC

EMEA

US POLITICS: WILL DISCORD CONTINUE?

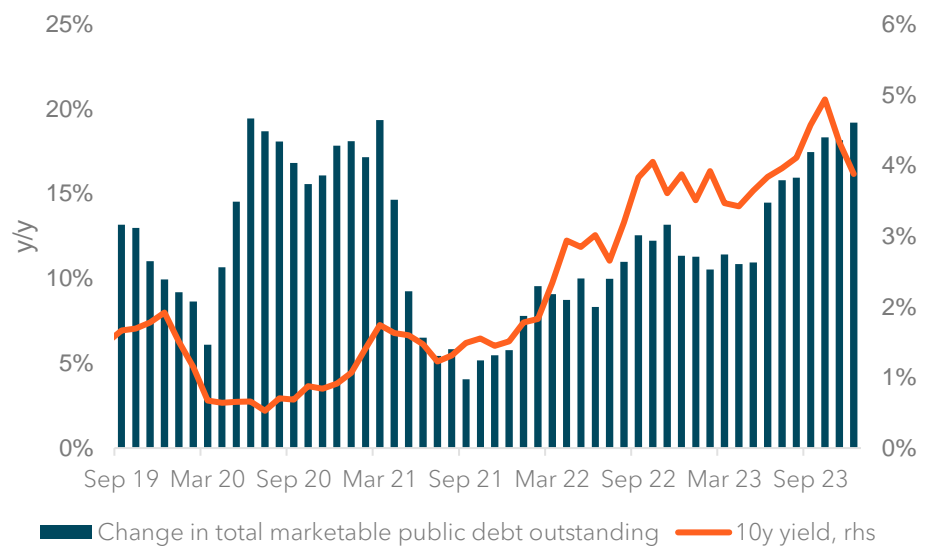
Our view: Policy uncertainty and volatility throughout 2024

- Congressional setup remains challenging – deep polarization; House Speaker to struggle to maintain any policy momentum
- Government shutdown or not? We think likely. Fiscal policy and funding President Biden’s foreign policy priorities sticking points
- Presidential election cycle will prove noisy and outcome close; House and Senate elections also delicately balanced

We think the biggest risk to relatively benign US economic and market outlooks is continued disfunction in Washington, DC. Like his predecessor, the current Speaker of the House faces a risk of ouster over budget plans. Both Democrats and Republicans in leadership positions face primaries as well, so it’s hard to say how their platforms might evolve. To us, all this seems to add to the risk of a government shutdown. Significant buying of US debt as per our iFlow data highlights how its reversal could prove problematic. Markets also face potential volatility from presidential primaries as well as from what promises to be a noisy race for the White House in November.

We are concerned that a government shutdown would be seen as credit-negative for the sovereign and result in upward pressure on bond yields. The chart below illustrates the impact of rising government borrowing on the 10y Treasury yield – especially following resolution of the debt-ceiling impasse in late May 2023. We think this relationship will likely hold in 2024.

EXHIBIT 3: PUBLIC DEBT AND BOND YIELDS



SOURCE: BNY MELLON IFLOW, US CBO

US

EMEA

APAC

UKRAINE, GEOPOLITICAL RISKS - MORE WAR OR PEACE?

Market Consensus: Long and extended conflict with Russia win

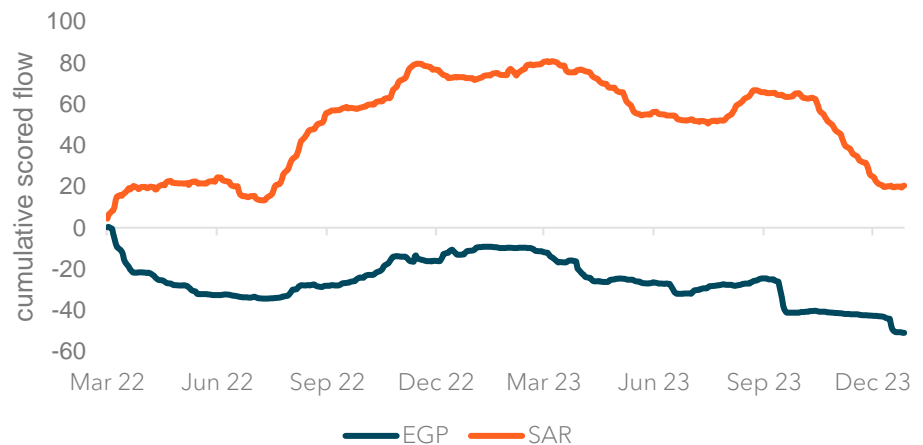
Our View: Peace, but it will be tumultuous

- Market consensus: Russia-Ukraine/Israel-Hamas no end soon
- Russia-Ukraine a drag on Europe, emerging markets
- Post-war rebuilds likely mean more debt, inflation risk anew
- Investment flows tell different stories for Saudi Arabia, Egypt

Market views around the war in Ukraine appear to have faded to it being a constant - a drag on Europe and emerging markets. We think the chance of a cessation of hostilities is underpriced. Observers of geopolitics have cited three main ways the war might resolve: Russia’s election in March causes President Putin to soften his stance; China/US/Saudi Arabia/UAE/Qatar or other nations broker a peace deal; Russia or Ukraine wins outright. In terms of markets, we think the net result of any peace could be significant in the respect of infrastructure rebuild - and in the debt needed to pay for it. This could result in inflation risks rising again.

In the Israel-Hamas war markets see risks of a longer conflict, of US entanglement, and of larger regional repercussions. Beyond day-to-day oil moves, markets appear to see clear consequences for Saudi Arabia and Egypt. Saudi oil has replaced Russia’s as the go-to source, and the investment money shows in iFlow cumulative investments data. Egypt, however, is being viewed differently given its dependence on Ukraine for grains and its geographical proximity to Gaza/Israel. Outflows from Egypt might have been aggravated by uncertainties heading into the country’s election in December. SAR/EGP may be a barometer for “peace risk”.

EXHIBIT 4: KEY FRONTIER MARKET FX FLOWS



EGYPT VS. SAUDI FX FLOWS POST UKRAINE WAR

SOURCE: BNY MELLON IFLOW

US

EMEA

APAC

EU MAJOR ECONOMIES INDUSTRIALS VS AUTOS

SOURCE: BNY MELLON IFLOW

EUROZONE: ECB EASING & EURUSD?

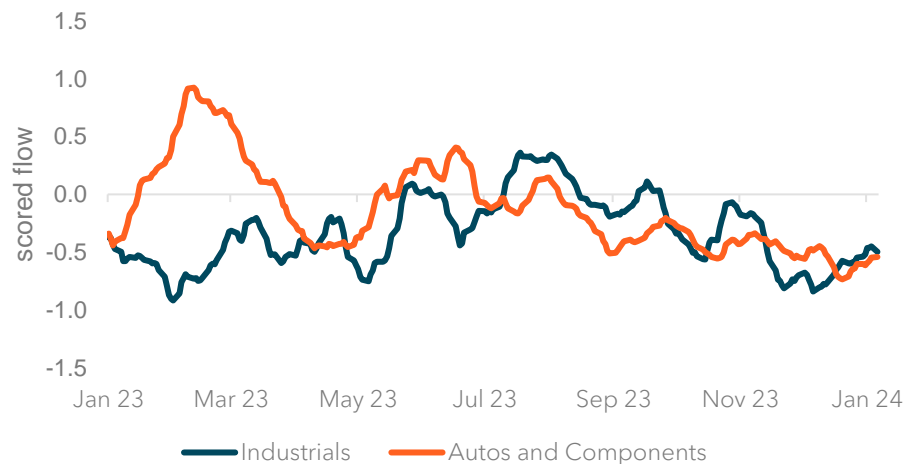
Market Consensus: EURUSD above 1.10 by end-2024

Our view: EURUSD down to parity before stabilizing

- Eurozone facing structural economic headwinds
- ECB rate cuts to match or even surpass Fed's due to growth concerns
- Euro overvalued; ECB may see it as a disinflation risk

Market pricing points to the ECB cutting in Q1, though we suspect that the Governing Council may choose to wait until April or just after the Fed moves to give itself some room. However, structural headwinds for the Eurozone, from very weak fiscal impulse to competitiveness losses in the auto sector, likely mean severe growth risks and so require a stronger response.

EXHIBIT 5: DEVELOPED EUROPE INDUSTRIAL AND AUTO FLOWS



iFlow indicates that cross-border flows into Industrials, in particular autos and components, deteriorated materially through H2 2023. The rise of China's a battery electric vehicle (BEV) exporter threatens to disrupt global auto markets, which deliver much of Europe's industrial value-add. A growth-damaging trade dispute between the EU and China might loom.

High-frequency data suggests significant labour market deceleration in Eurozone services, adding to problems already in manufacturing. The risk: neither sector can recover in the short and medium term. Fiscal impulse does not look likely given the direction of travel for German and EU politics. The combined growth and disinflation risks could trigger an ECB policy response sharply divergent to the Fed. The ECB may even choose to lean against the euro as an alternative measure to loosen financial conditions.

US

EMEA

APAC

SET PROJECTIONS FOR EU PARLIAMENT

SOURCE: BNY MELLON IFLow, EU COMMISSION

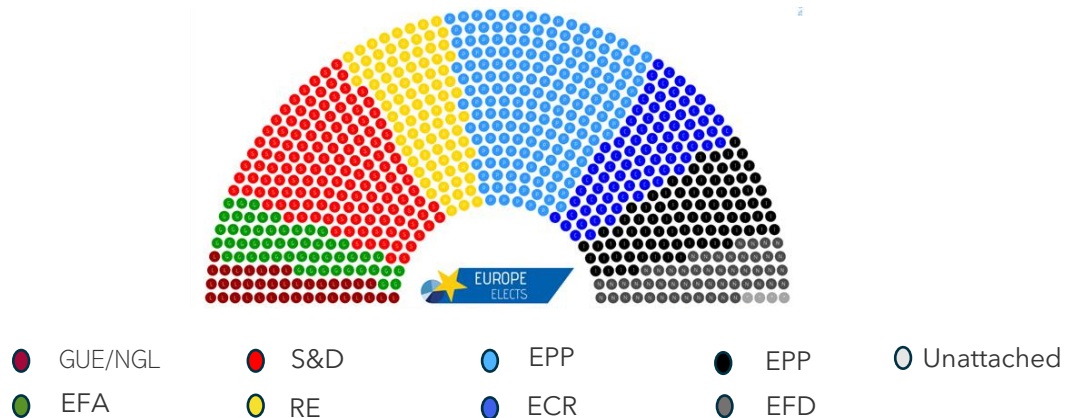
CONTRIBUTOR: BEN POTT, GOVERNMENT RELATIONS

EU POLITICS: ELECTIONS & RESETS ON THE AGENDA

Consensus: Extremes of left and right gain at expense of centerists

- EU Parliament elections June 6-9 will reset the legislative agenda, including new Commissioners and Parliamentarians
- Current polling points to a tight majority for Ursula von der Leyen's 2019 electoral coalition
- Expectations have centrist, Green parties to lose votes; conservative ECR group and far-right to be the main winners

EXHIBIT 6: SEAT PROJECTION FOR EUROPEAN PARLIAMENT



From a financial services perspective, the most contentious files have been agreed with Basel 3.1 (CRD 6/CRR 3), MiFID II review, and the AIFMD review getting the green light from negotiators in 2023. Though leaving it late, the EU's corporate sustainability due diligence directive (CS3D) was also agreed in December and, with technical trilogues ongoing, is expected to be voted through in April.

The big political topic of early 2024 will be the EU's position towards Ukraine. After EU leaders voted to start EU accession talks with Ukraine in mid-December, the remaining key sticking point is the EU's €50bn financial package to support Ukraine's military. Hungary recently vetoed the financing package, which will again be on the agenda at the Feb. 1 EU leader's meeting. The key risk is that Hungary's veto effectively paralyzes EU decision-making on Ukraine.

Heading into the June elections, particular focus will be on the larger member states, specifically Germany, France, Spain and Poland. Given the large size of their EU Parliamentary delegations, a significant strengthening of the far-right ahead of the elections could have implications for the final composition of the EU Parliament. Current polling still suggests a majority for the centrist parties, namely the EPP (center-right), socialists (center-left) and Renew (centrist, liberal) - but also a significant strengthening of support for the conservative, Eurosceptic right (ECR) and far-right (ID). The key risk to watch for is if populist parties can block decision-making. For now, the base case assumes a majority for the centrist parties.

US

EMEA

APAC

USDJPY AT END-2024: 100 OR 200?

Market Consensus: Weaker JPY amid Bank of Japan status quo

Our view: 100, but not ruling out test of 150 again first

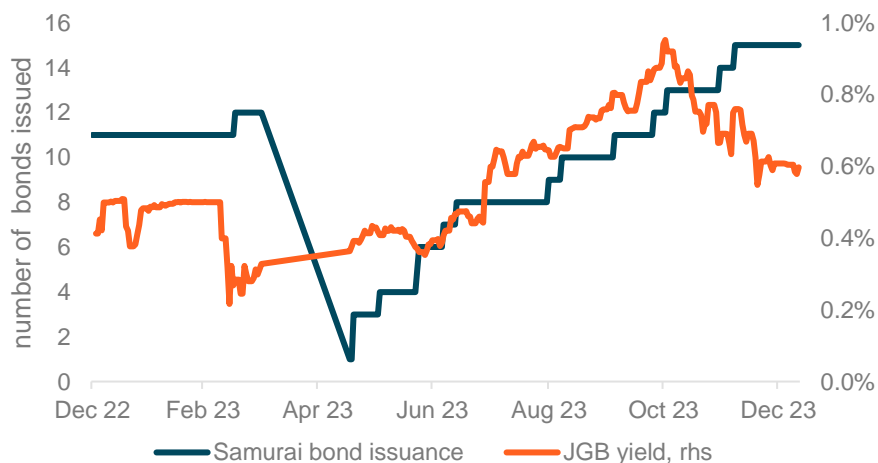
- Market consensus sees more yen weakness as the BoJ stays soft on inflation and continues to monetize Japan debt
- Most see BoJ only lifting its policy rate zero by March 30 and reluctantly ending yield curve control - but remaining behind the inflation curve, thereby keeping policy accommodative
- Our view: BoJ ends both negative rates and YCC in early 2024, skewing USDJPY risks to 100, not 200, by end-2024 as JGB yields rise and Japan investors shift to a "home bias"
- Potential unwinding of JPY-funded global carry trades is not fully priced - could be a notable risk into 2024

Our iFlow data shows real money investors not short yen, modestly long instead, even amid underweight holdings of JGBs and the TOPIX. The issues we see for USDJPY revolve around both monetary and fiscal policy. We think the risk of a reversal in prevailing JPY weakness is less about the Federal Reserve's rate policy and more about the Bank of Japan's inevitable shift to tighter policy. How this plays out matters, as 2023 brought several unsustainable forces. One for instance was new foreign issuance of yen-denominated debt, which in essence banks on both a weaker yen and lower yen rates for longer. This so-called Samurai issuance should be more about the rise in 10y JGB yields but instead has risen in lockstep - and is now on pace to break pre-pandemic issuance levels. As the BoJ shifts policy, this debt will need to be hedged, adding to downside pressure on USDJPY.

SAMURAI BOND ISSUANCE AND JGB YIELDS

SOURCE: BNY MELLON, BLOOMBERG

EXHIBIT 8: SAMURAI BOND ISSUANCE VS. JGB YIELDS



US

EMEA

APAC

CHINA OFFICIAL PORTFOLIO FLOWS AND IFLOW PROXY

SOURCE: BNY MELLON IFLOW, CHINA NBS

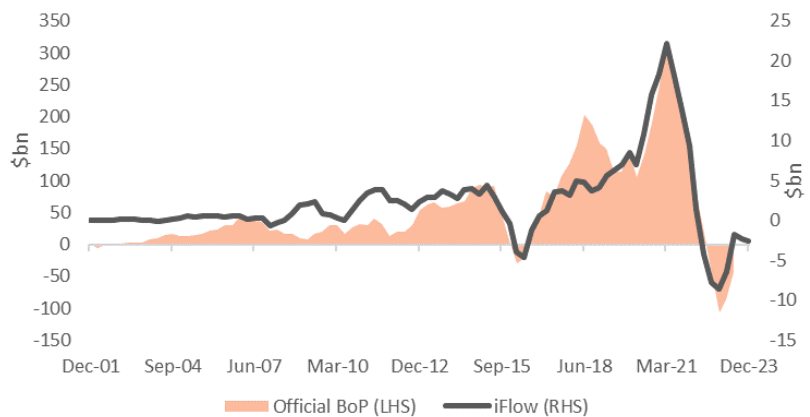
CHINA GDP IN 2024: 3% OR 5%?

Market consensus: 4.5% or lower

Our view: At least 5%, and surprisingly strong capital inflows

- Fiscal stimulus announced in October shows growth remains a priority
- China's central bank will need to use its balance sheet more, with TLTRO/QE-like instruments, e.g., pledged supplementary lending (PSL)
- Equities to rally on boost from fiscal expansion and tech - investors are underweight China; sovereign bond flow already recovering strongly

EXHIBIT 7: CHINA OFFICIAL PORTFOLIO FLOWS VS. IFLOW



Despite its late arrival, the year-end deficit expansion should be able to lift 2023 growth to 5%. We do not see this baseline target changing in 2024, especially if the deficit target is lifted to well above 3% of GDP. Coupled with the multiplier effect and the lack of additional real-estate stress, we still see growth closer to 5% in 2024. Generating more sustainable growth, even at a lower level, does not require the level of constant intervention seen in 2023.

We acknowledge that household demand in China remains subdued, and that there is still much reluctance to reorient fiscal resources there - the last round of material household tax cuts was in 2019. Until clear signs of rebalancing emerge, asset allocation flows will likely be tentative. However, iFlow indicates that global investors are already coming from a very underweight position, as index-inclusion flows since 2018 have been fully liquidated. Our data show China government bonds the strongest-performing Emerging Market sovereign debt market in December.

Notwithstanding geopolitical and regulatory risks, the combination of growth stabilization, new high value-added industrial champions and ongoing policy support suggests strong upside in capital inflows this year.

BNY MELLON IFLOW CONTRIBUTORS TO THIS PUBLICATION



BOB SAVAGE
Head of Markets
Strategy & Insights



GEOFF YU
EMEA Macro Strategist



JOHN VELIS, PHD
Americas Macro Strategist



WEE KHOON CHONG
APAC Macro Strategist

CONTACT US:

iFlow@bnymellon.com

FOR MORE IFLOW CONTENT:

[Subscribe Here](#)

DISCLAIMER AND DISCLOSURES:

BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may be used as a generic term to reference the corporation as a whole and/or its various group entities. This material and any products and services may be issued or provided under various brand names of BNY Mellon in various countries by duly authorized and regulated subsidiaries, affiliates, and joint ventures of BNY Mellon, which may include any of those listed below:

The Bank of New York Mellon, a banking corporation organized pursuant to the laws of the State of New York, whose registered office is at 240 Greenwich St, NY, NY 10286, USA. The Bank of New York Mellon is supervised and regulated by the New York State Department of Financial Services and the US Federal Reserve and is authorized by the Prudential Regulation Authority (“PRA”) (Firm Reference Number: 122467).

The Bank of New York Mellon operates in the UK through its London branch (UK companies house numbers FC005522 and BR000818) at 160 Queen Victoria Street, London, EC4V 4LA and is subject to regulation by the Financial Conduct Authority (“FCA”) at 12 Endeavour Square, London, E20 1JN and limited regulation by the PRA at Bank of England, Threadneedle St, London, EC2R 8AH. Details about the extent of our regulation by the PRA are available from us on request.

The Bank of New York Mellon SA/NV, a Belgian limited liability company, registered in the RPM Brussels with company number 0806.743.159, whose registered office is at Boulevard Anspachlaan 1, B-1000 Brussels, Belgium, authorized and regulated as a significant credit institution by the European Central Bank (“ECB”) at Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany, and the National Bank of Belgium (“NBB”) at boulevard de Berlaimont/de Berlaimontlaan 14, 1000 Brussels, Belgium, under the Single Supervisory Mechanism and by the Belgian Financial Services and Markets Authority (“FSMA”) at Rue du Congrès/Congresstraat 12-14, 1000 Brussels, Belgium for conduct of business rules, and is a subsidiary of The Bank of New York Mellon.

The Bank of New York Mellon SA/NV operates in Ireland through its Dublin branch at Riverside II, Sir John Rogerson’s Quay Grand Canal Dock, Dublin 2, D02KX60, Ireland and is registered with the Companies Registration Office in Ireland No. 907126 & with VAT No. IE 9578054E. The Bank of New York Mellon SA/NV, Dublin Branch is subject to limited additional regulation by the Central Bank of Ireland at New Wapping Street, North Wall Quay, Dublin 1, D01 F7X3, Ireland for conduct of business rules and registered with the Companies Registration Office in Ireland No. 907126 & with VAT No. IE 9578054E.

The Bank of New York Mellon SA/NV operates in Germany through its Frankfurt branch “The Bank of New York Mellon SA/NV, Asset Servicing, Niederlassung Frankfurt am Main”, and has its registered office at MesseTurm, Friedrich-Ebert-Anlage 49, 60327 Frankfurt am Main, Germany. It is subject to limited additional supervision by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany) under registration number 122721.

The Bank of New York Mellon SA/NV operates in the Netherlands through its Amsterdam branch at Claude Debussylaan 7, 1082 MC Amsterdam, the Netherlands. The Bank of New York Mellon SA/NV, Amsterdam Branch is subject to limited additional supervision by the Dutch Central Bank (“De Nederlandsche Bank” or “DNB”) on integrity issues only (registration number 34363596). DNB holds office at Westeinde 1, 1017 ZN Amsterdam, the Netherlands.

The Bank of New York Mellon SA/NV operates in Luxembourg through its Luxembourg branch at 24 rue Eugene Ruppert, Vertigo Building – Polaris, L- 2453, Luxembourg. The Bank of New York Mellon SA/NV, Luxembourg Branch is subject to limited additional regulation by the Commission de Surveillance du Secteur Financier at 283, route d’Arlon, L-1150 Luxembourg for conduct of business rules, and in its role as UCITS/AlF depositary and central administration agent.

The Bank of New York Mellon SA/NV operates in France through its Paris branch at 7 Rue Scribe, Paris, France 75009, France. The Bank of New York Mellon SA/NV, Paris Branch is subject to limited additional regulation by Secrétariat Général de l’Autorité de Contrôle Prudential et Première Direction du Contrôle de Banques (DCB 1), Service 2, 61, Rue Talbot, 75436 Paris Cedex 09, France (registration number (SIREN) Nr. 538 228 420 RCS Paris - CIB 13733).

The Bank of New York Mellon SA/NV operates in Italy through its Milan branch at Via Mike Bongiorno no. 13, Diamantino building, 5th floor, Milan, 20124, Italy. The Bank of New York Mellon SA/NV, Milan Branch is subject to limited additional regulation by Banca d’Italia - Sede di Milano at Divisione Supervisione Banche, Via Cordusio no. 5, 20123 Milano, Italy (registration number 03351).

The Bank of New York Mellon SA/NV operates in Denmark as The Bank of New York Mellon SA/NV, Copenhagen Branch, filial of The Bank of New York Mellon SA/NV, Belgium, and has its registered office at Tuborg Boulevard 12, 3, DK-2900Hellerup, Denmark. It is subject to limited additional regulation by the Danish Financial Supervisory Authority (Finanstilsynet, Århusgade 110, 2100 København Ø).

The Bank of New York Mellon SA/NV operates in England through its London branch at 160 Queen Victoria Street, London EC4V 4LA, UK, registered in England and Wales with numbers FC029379 and BR014361. The Bank of New York Mellon SA/NV, London branch is authorized by the ECB (address above) and is deemed authorized by the Prudential Regulation Authority (address above). Subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details of the Temporary Permissions Regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorisation, are available on the Financial Conduct Authority’s website.

The Bank of New York Mellon SA/NV operates in Spain through its Madrid branch with registered office at Calle José Abascal 45, Planta 4ª, 28003, Madrid, and enrolled on the Reg. Mercantil de Madrid, Tomo 41019, folio 185 (M-727448). The Bank of New York Mellon, Sucursal en España is registered with Banco de España (registration number 1573).

Regulatory information in relation to the above BNY Mellon entities operating out of Europe can be accessed at the following website: <https://www.bnymellon.com/RIID>.

UK Financial Promotion Disclosure: This communication is being issued by The Bank of New York Mellon SA/NV to, and/or is directed at, persons to whom it may lawfully be issued or directed at under the United Kingdom (“UK”) Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the “FPO”) including persons who are authorised (“authorised persons”) under the UK Financial Services and Markets Act 2000 Act (the “Act”) and certain persons having professional experience in matters relating to investments. The products/services referred in this communication are only available to such persons in the UK and this communication must not be relied or acted upon by any other persons in the UK.

The Bank of New York Mellon SA/NV is not an “authorised person” in the UK under the Act. Please note that the individual with whom you are communicating, has the authority to issue communications on behalf of more than one entity within The Bank of New York Mellon Corporation group of entities, and may not be employed by The Bank of New York Mellon SA/NV. Please consult an authorised person if in doubt. The communication is not covered by UK regulatory regime protections.

This communication is exempt from the general restriction in Section 21 of the Act on the communication of invitations or inducements to engage in investment activity on the grounds that it is being issued to and/or directed at only the types of person referred to above.

The content of this communication has not been approved by an authorised person and such approval is, save where this communication is directed at or issued to the types of person referred to above, required by Section 21 of the Act.

For clients located in Switzerland

The information provided herein does not constitute an offer of financial instrument or an offer to provide financial service in Switzerland pursuant to or within the meaning of the Swiss Financial Services Act (“FinSA”) and its implementing ordinance. This is solely an advertisement pursuant to or within the meaning of FinSA and its implementing ordinance. This contains an advertisement pursuant to or within the meaning of FinSA and its implementing ordinance. Please be informed that The Bank of New York Mellon and The Bank of New York Mellon SA/NV are entering into the OTC derivative transactions as a counterparty, i.e. acting for their own account or for the account of one of their affiliates. As a result, where you enter into any OTC derivative transactions with us, you will not be considered a “client” (within the meaning of the FinSA) and you will not benefit from the protections otherwise afforded to clients under FinSA. Accordingly, this should not be considered an advertisement pursuant to or within the meaning of FinSA and its implementing ordinance.

The Bank of New York Mellon, Singapore Branch, is subject to regulation by the Monetary Authority of Singapore. The Bank of New York Mellon, Hong Kong Branch (a branch of a banking corporation organized and existing under the laws of the State of New York with limited liability), is subject to regulation by the Hong Kong Monetary Authority and the Securities & Futures Commission of Hong Kong.

For recipients of this information located in Singapore: This material has not been reviewed by the Monetary Authority of Singapore.

The Bank of New York Mellon is regulated by the Australian Prudential Regulation Authority and also holds an Australian Financial Services Licence No. 527917 issued by the Australian Securities and Investments Commission to provide financial services to wholesale clients in Australia.

For clients located in Brunei

The Bank of New York Mellon does not have a banking license under the Banking Order 2006 of Brunei, or capital market service license under the Securities Market Order 2013 to carry out banking business, or to provide investment advice to clients in, or to undertake investment business, in Brunei.

For clients located in Malaysia

None of the Bank of New York Mellon group entities, including the Bank of New York Mellon, Kuala Lumpur, Representative Office, are registered or licensed to provide, nor does it purport to provide, financial or capital markets services of any kind in Malaysia under the Capital Markets and Services Act 2007 of Malaysia or Financial Services Act 2013 of Malaysia.

For clients located in New Zealand

The Bank of New York Mellon does not hold a market services license under the Financial Markets Conduct Act 2013 of New Zealand and it is not a registered bank in New Zealand.

The Bank of New York Mellon has various other branches in the Asia-Pacific Region which are subject to regulation by the relevant local regulator in that jurisdiction.

The Bank of New York Mellon Securities Company Japan Ltd, as intermediary for The Bank of New York Mellon.

The Bank of New York Mellon, DIFC Branch, regulated by the Dubai Financial Services Authority (“DFSA”) and located at DIFC, The Exchange Building 5 North, Level 6, Room 601, P.O. Box 506723, Dubai, UAE, on behalf of The Bank of New York Mellon, which is a wholly-owned subsidiary of The Bank of New York Mellon Corporation.

Past performance is not a guide to future performance of any instrument, transaction or financial structure and a loss of original capital may occur. Calls and communications with BNY Mellon may be recorded, for regulatory and other reasons.

Disclosures in relation to certain other BNY Mellon group entities can be accessed at the following website: <http://disclaimer.bnymellon.com/eu.htm>.

This material is intended for wholesale/professional clients (or the equivalent only), is not intended for use by retail clients and no other person should act upon it. Persons who do not have professional experience in matters relating to investments should not rely on this material. BNY Mellon will only provide the relevant investment services to investment professionals.

Not all products and services are offered in all countries.

If distributed in the UK, this material is a financial promotion.} If distributed in the EU, this material is a marketing communication.

This communication is exempt from the general restriction in Section 21 of the Act on the communication of invitations or inducements to engage in investment activity on the grounds that it is being issued to and/or directed at only the types of person referred to above.

The content of this communication has not been approved by an authorised person and such approval is, save where this communication is directed at or issued to the types of person referred to above, required by Section 21 of the Act.}.

This material, which may be considered advertising (but shall not be considered advertising under the laws and regulations of Brunei, Malaysia or Singapore), is for general information purposes only and is not intended to provide legal, tax, accounting, investment, financial or other professional advice on any matter. This material does not constitute a recommendation or advice by BNY Mellon of any kind. Use of our products and services is subject to various regulations and regulatory oversight. You should discuss this material with appropriate advisors in the context of your circumstances before acting in any manner on this material or agreeing to use any of the referenced products or services and make your own independent assessment (based on such advice) as to whether the referenced products or services are appropriate or suitable for you. This material may not be comprehensive or up to date and there is no undertaking as to the accuracy, timeliness, completeness or fitness for a particular purpose of information given. BNY Mellon will not be responsible for updating any information contained within this material and opinions and information contained herein are subject to change without notice. BNY Mellon assumes no direct or consequential liability for any errors in or reliance upon this material.

This material may not be distributed or used for the purpose of providing any referenced products or services or making any offers or solicitations in any jurisdiction or in any circumstances in which such products, services, offers or solicitations are unlawful or not authorized, or where there would be, by virtue of such distribution, new or additional registration requirements.

Any references to dollars are to US dollars unless specified otherwise.

This material may not be reproduced or disseminated in any form without the prior written permission of BNY Mellon. Trademarks, logos and other intellectual property marks belong to their respective owners.

Money market fund shares are not a deposit or obligation of BNY Mellon. Investments in money market funds are not insured, guaranteed, recommended or otherwise endorsed in any way by BNY Mellon, the Federal Deposit Insurance Corporation or any other government agency. Securities instruments and services other than money market mutual funds and off-shore liquidity funds are offered by BNY Mellon Capital Markets, LLC and The Bank of New York Mellon, London Branch.

The terms of any products or services provided by BNY Mellon to a client, including without limitation any administrative, valuation, trade execution or other services shall be solely determined by the definitive agreement relating to such products or services. Any products or services provided by BNY Mellon shall not be deemed to have been provided as fiduciary or adviser except as expressly provided in such definitive agreement. BNY Mellon may enter into a foreign exchange transaction, derivative transaction or collateral arrangement as a counterparty to a client, and its rights as counterparty or secured party under the applicable transactional agreement or collateral arrangement shall take precedence over any obligation it may have as fiduciary or adviser or as service provider under any other agreement.

Investment in any floating rate instrument presents unique risks, including the discontinuation of the floating rate reference or any successors or fallbacks thereto. BNY Mellon does not guarantee and is not responsible for the availability or continued existence of a floating rate reference associated with any particular instrument. Before investing in any floating rate instrument, please evaluate the risks independently with your financial, tax and other advisors as you deem necessary.

Pursuant to Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and the applicable rules thereunder, The Bank of New York Mellon is provisionally registered as a swap dealer with the Commodity Futures Trading Commission, is a swap dealer member of the National Futures Association (NFA ID 0420990) and is conditionally registered as a security-based swap dealer with the Securities Exchange Commission.

BNY Mellon (including its broker-dealer affiliates) may have long or short positions in any currency, derivative or instrument discussed herein. BNY Mellon has included data in this material from information generally available to the public from sources believed to be reliable. Any price or other data used for illustrative purposes may not reflect actual current conditions. No representations or warranties are made, and BNY Mellon assumes no liability, as to the suitability of any products and services described herein for any particular purpose or the accuracy or completeness of any information or data contained in this material. Price and other data are subject to change at any time without notice.

Pershing Prime Services is a service of Pershing LLC, member FINRA, NYSE, SIPC, a wholly owned subsidiary of The Bank of New York Mellon Corporation (“BNY Mellon”). Member of SIPC. Securities in your account protected up to \$500,000. For details, please see www.sipc.org.

The Bank of New York Mellon SA/NV only provides its services outside of Hong Kong. Any transactions that are intermediated by The Bank of New York Mellon, Hong Kong Branch are carried through The Bank of New York Mellon, Hong Kong Branch in compliance with the “dealing through” (or other) exemption, and not directly by The Bank of New York Mellon SA/NV.

Investment in any floating rate instrument presents unique risks, including the discontinuation of the floating rate reference or any successors or fallbacks thereto. BNY Mellon does not guarantee and is not responsible for the availability or continued existence of a floating rate reference associated with any particular instrument. Before investing in any floating rate instrument, please evaluate the risks independently with your financial, tax and other advisors as you deem necessary.

Neither BNY Mellon nor any other third party provider shall be liable for any errors in or delays in providing or making available the data (including rates, WM/Reuters Intra-Day Spot Rates and WM/Reuters Intra-Day Forward Rates) contained within this service or for any actions taken in reliance on the same, except to the extent that the same is directly caused by its or its employees’ negligence. The WM/Reuters Intra-Day Spot Rates and WM/Reuters Intra-Day Forward Rates are provided by The World Markets Company plc (“WM”) in conjunction with Reuters. WM shall not be liable for any errors in or delays in providing or making available the data contained within this service or for any actions taken in reliance on the same, except to the extent that the same is directly caused by its or its employees’ negligence.

The products and services described herein may contain or include certain “forecast” statements that may reflect possible future events based on current expectations. Forecast statements are neither historical facts nor assurances of future performance. Forecast statements typically include, and are not limited to, words such as “anticipate”, “believe”, “estimate”, “expect”, “future”, “intend”, “likely”, “may”, “plan”, “project”, “should”, “will”, or other similar terminology and should NOT be relied upon as accurate indications of future performance or events. Because forecast statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict.

iFlow™ is a registered trademark of The Bank of New York Mellon Corporation under the laws of the United States of America and other countries. iFlow captures select data flows from the firm’s base of assets under custody, as well as from its trading activity with non-custody clients, on an anonymized and aggregated basis.

This document is intended for private circulation. Persons accessing, or reading, this material are required to inform themselves about and to observe any restrictions that apply to the distribution of this information in their jurisdiction.

FX Overlay is provided under and subject to the terms of a definitive agreement between BNY Mellon and the client. BNY Mellon exercises no investment discretion thereunder, but acts solely pursuant to the instructions in such agreement or otherwise provided by the client. Unless provided by definitive agreement, BNY Mellon is not an agent or fiduciary thereunder, and acts solely as principal in connection with related foreign exchange transactions.

The Bank of New York Mellon, member of the Federal Deposit Insurance Corporation (“FDIC”).

© 2023 The Bank of New York Mellon Corporation. All rights reserved.