September 6, 2023 10:27 PM GMT

Canada Economics and Global Macro Strategy | North America

BoC Reaction: Shift in Tone

MORGAN STANLEY & CO. LLC

Lenoy Dujon
US/Canada Economist
Lenoy.Dujon@morganstanley.com +1 212 761-2779

Andrew M Watrous
Strategist
Andrew.Watrous@morganstanley.com +1 212 761-5287

Zoe K Strauss
Strategist
Zoe.Strauss@morganstanley.com +1 212 761-0407

As we expected, the Bank of Canada left its policy rate unchanged at 5.00%. The Bank signaled a softer tone in line with recent weakness seen in the data. Nonetheless, we still believe the focus remains on the trajectory of inflation and inflationary pressures going forward.

Economics: The Bank of Canada (BoC or The Bank) left its policy rate unchanged at 5.00% at its September meeting. The Bank signaled a softer tone in light of the recent weakness in the economic data. We maintain our call for the key benchmark rate to stay at 5.00% for the rest of the year. The trajectory of excess demand, wage growth, inflation expectations, and corporate pricing behavior still remain the key determinants in the Bank's decision-making going forward.

Global Macro Strategy: The BoC removed the word “persistent” to describe the remaining excess demand in the Canadian economy. Instead, the rate announcement noted that "excess demand in the economy is easing." We expect markets to price in more easing in 2024 given the BoC's focus on excess demand as the driver for underlying inflationary pressures. Our economist expects an additional ~65bp of rate cuts relative to what current market pricing implies. We continue to recommend receiving the December 2024 BoC meeting.

Canada Economics

Lenoy Dujon

The Bank of Canada held its policy rate unchanged at 5.00% at its September meeting. The hold was in light of "**recent evidence that excess demand in the economy is easing**", coupled with the acknowledgement from the Governing Council of the "**lagged effects of monetary policy**" still in the pipeline. Given this, we believe the Bank will opt for the "higher-for-longer" approach. **We maintain our call for the key benchmark rate to remain at 5.00% for the remainder of 2023.**

Today's decision came with a shift in tone that was softer than we had expected, as the economy shifts towards a period of weak growth. Today's statement noted that the Canadian economy is off to a weak start in the 2H23. Second-quarter GDP contracted due to declines in residential investment, household spending, and the impact from the wildfires. Further, the Bank noted that household credit growth slowed as the impact of tighter monetary policy continued to restrain spending among borrowers.

The Bank also highlighted that tightness in the labor market continues to ease gradually. This comes as the unemployment rate has risen to 5.5% in July, from 5.0% in April, and job vacancies have fallen to their lowest level in over two years. However, the Bank did caution that wage growth continues to hover around the 4%-5% level — **a level that is not consistent with its 2% inflation target.**

On inflation, though inflation has come down from its peak last year, the statement reflected that **recent CPI pressures remain broad-based**. Both the three-month measures and year-over-year measures of core inflation are running ~3.5%, indicating **that more progress is still needed on the inflation front.** Given this, the Governing Council cautioned that "the longer high inflation persists, the greater the risk that elevated inflation becomes entrenched, making it more difficult to restore price stability."

We still note that despite today's decision to hold rates unchanged**, the Bank maintains its hawkish tilt in its monetary policy stance.** As highlighted prior, today's statement highlighted that the Governing Council **"remains concerned about the persistence of underlying inflation pressures"**, and cautioned that it is prepared to **raise rates further if needed**. The Bank reiterated that the Governing Council will continue to assess the dynamics of core inflation, as well as the outlook for CPI inflation. Specifically, **excess demand, wage growth, inflation expectations, and corporate pricing behavior** remain the key measures that the Governing Council is watching to gauge whether inflation is moving back to target.

Looking ahead, we expect economic growth and inflationary pressures to continue to slow in the back half of the year. We expect tight monetary policy to continue to weigh on business investment, household spending, and the labor market. Further, we see export growth weakening as global demand slows.

Governor Macklem will speak tomorrow at the Calgary Chamber of Commerce, where we will be attentive to any further details on today's decision.

Global Macro Strategy

Zoe Strauss, Andrew Watrous

As markets anticipated, the Bank of Canada kept its policy rate unchanged at 5.00%.

Observers expected an incrementally more cautious tone on the economic outlook after the downward surprise in 2Q GDP and the downward revision to 1Q data.

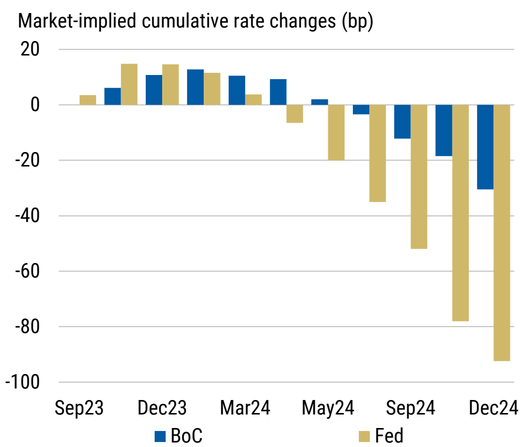
However, the September statement sounded marginally more cautious than those expectations given that the statement removed the word "persistent" in relation to excess demand in the Canadian economy.

Instead, the Governing Council noted that excess demand is "easing"

Given the significant shift in the BoC's tone following recent data softening, we expect pricing for late 2024 policy to shift in a CAD-negative direction.

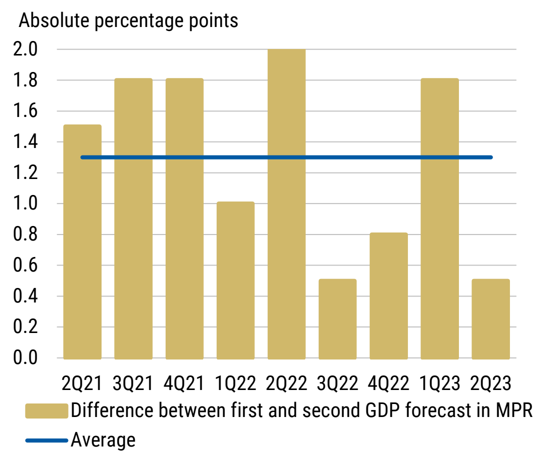
We continue to see room for markets to price in additional easing by the end of next year and recommend receiving the December 2024 BoC meeting (Exhibit 1).

Exhibit 1: We see room for market pricing of BoC policy to reflect additional easing in 2024



Source: MS STIRT Desk, Morgan Stanley Research

Exhibit 2: Revisions between the first estimate and second estimate of quarterly GDP have been relatively large



Source: Bank of Canada, Morgan Stanley Research

Excess demand is no longer "persistent", it is "easing": The final paragraph of the July announcement stated that both excess demand and core inflation were "proving more persistent."

In September, the BoC refrained from characterizing the remaining excess demand as being "persistent," and used the word "easing" instead.

The paragraph focused on the state of the Canadian economy changed significantly as well.

In July, the BoC described the Canadian economy as being "stronger than expected" due to higher-than-expected consumption and a pickup in housing activity.

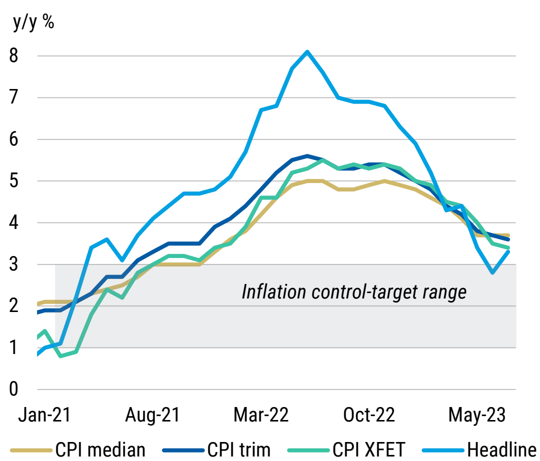
In September, the Governing Council announced that the Canadian economy "has entered a period of weaker growth," reflecting slowdown in the consumption growth and the housing market.

The notable shift in language raises the risk of a large revision to the Canadian growth outlook at the October MPR and the timing of the output gap closure.

We have seen relatively large revisions from the first to the second forecast of quarterly GDP numbers in recent MPRs (Exhibit 2). Our economist expects 3Q GDP growth of 0% q/q SAAR. The BoC projected a 1.5% increase in its first forecast for 3Q GDP in the July MPR, which it may have to revise if recent weakness in economic data persists.

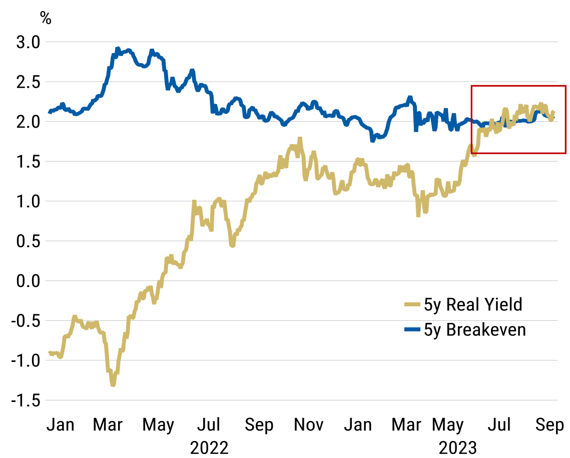
We expect investors to price in additional easing in 2024 for the BoC given that excess demand has been one of the main indicators driving the BoC's reaction function.

Exhibit 3: Progress on core inflation remains more limited than headline, which the July MPR attributed mainly to excess demand in the economy



Source: Bloomrberg, Macrobond, Morgan Stanley Research

Exhibit 4: Breakevens have stabilized and suggest that inflation expectations remain anchored



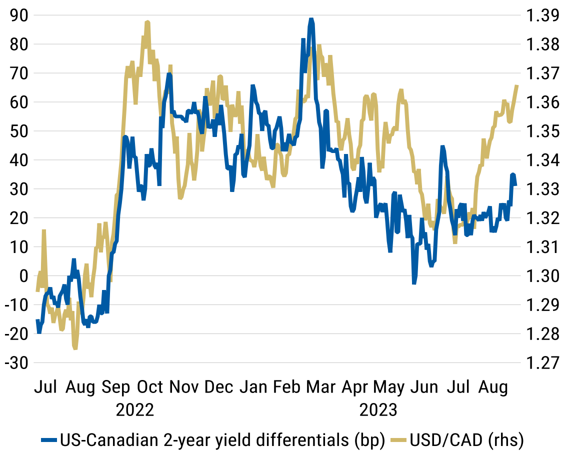
Source: Bank of Canada, Morgan Stanley Research

Risks of inflation "persistence" remain, but progress is no longer "stalling": The September statement reiterated the Governing Council's concerns about persistent underlying price pressures.

However, also on the inflation outlook the Governing Council seemed slightly more optimistic. The BoC removed language about the risks that "progress towards the 2% target could stall."

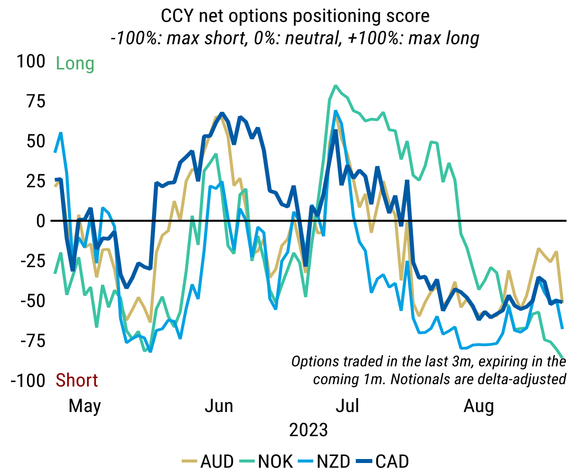
After all, the delayed return to target in the July MPR was largely a reflection of the seemingly "greater persistence of excess demand" in 2023 and "upward revision to house prices" as opposed to a significant shift in inflation expectations.

Exhibit 5: USD/CAD has traded above rate differentials over the summer



Source: Bloomberg, Macrobond, Morgan Stanley Research

Exhibit 6: Options data suggest that investors are short CAD and other risk-sensitive currencies



Source: DTCC, Macrobond, Morgan Stanley Research

Rates: The BoC's shift in tone suggests that the bar for additional tightening has been raised, while the output gap may be closed sooner than forecasted in the July MPR.

We continue to see room for markets to price in additional easing by the end of next year and recommend receiving the December 2024 BoC meeting.

Lower US yields, as our US rates colleagues expect, should contribute to lower yields in Canada too.

USD/CAD: We remain neutral on USD/CAD. A decline in US rates, as our US rates strategists forecast, should put downward pressure on USD/CAD. USD/CAD has traded over the summer above what rate differential would suggest.

Option data also suggest that positioning is already quite long USD/CAD (Exhibit 6).

On the other hand, global growth concerns amid risks of negative spillovers from economic weakness in China and further signs of a potential recession in the euro area may spur safe haven flows into USD.

Trade idea: Maintain receive December 2024 BoC at 4.68

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Receive Dec 2024 BoC	4.29%	16-Jun-23	The BoC resumed its tightening cycle in June after pausing in March 2023. We expect that, as the BoC tightens further, more easing will be required, reflected in more cuts priced in 2024. Market pricing implies around half the amount of rate cuts in 2024 than our economist expects.	Further upside surprises to the inflation and growth outlooks could keep the BoC more restrictive for longer.

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Zoe K Strauss; Andrew M Watrous.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictpolicies. A Portuguese version of the policy can be found at www.morganstanley.com.br

Important Regulatory Disclosures on Subject Companies

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Canada.

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Canada.

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of August 31, 2023)

The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm.

For disclosure purposes only (in accordance with FINRA requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1345	37%	273	43%	20%	606	39%
Equal-weight/Hold	1686	46%	301	47%	18%	719	47%
Not-Rated/Hold	3	0%	0	0%	0%	1	0%
Underweight/Sell	594	16%	67	10%	11%	218	14%
Total	3,628		641			1544	

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

Analyst Stock Ratings

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

12-18 months.

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

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

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

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

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

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

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

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

Important Disclosures for Morgan Stanley Smith Barney LLC & E*TRADE Securities LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at www.morganstanley.com/online/researchdisclosures. For Morgan Stanley specific disclosures, you may refer to www.morganstanley.com/researchdisclosures.

Each Morgan Stanley research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC and E*TRADE Securities LLC. This review and approval is conducted by the same person who reviews the research report on behalf of Morgan Stanley. This could create a conflict of interest.

Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of Canada.

Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions.

Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.

Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at http://www.morganstanley.com/matrix.

Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (http://www.morganstanley.com/terms.html). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (http://www.morganstanley.com/terms.html). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html).

If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A. located at Av. Brigadeiro Faria Lima, 3600, 6th floor, São Paulo - SP, Brazil; and is regulated by the Comissão de Valores Mobiliários; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V which is regulated by Comision Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Bank Asia Limited; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Bank Asia Limited, Singapore Branch (Registration number T14FC0118J); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited having Corporate Identification No (CIN) U22990MH1998PTC115305, regulated by the Securities and Exchange Board of India ("SEBI") and holder of licenses as a Research Analyst (SEBI Registration No. INH000001105); Stock Broker (SEBI Stock Broker Registration No. INZ000244438), Merchant Banker (SEBI Registration No. INM000011203), and depository participant with National Securities Depository Limited (SEBI Registration No. IN-DP-NSDL-567-2021) having registered office at 18th Floor, Tower 2, One World Center, Plot- 841, Jupiter Textile Mill Compound, Senapati Bapat Marg, Lower Parel, Mumbai 400013, India Telephone no. +91-22-61181000; Compliance Officer Details: Mr. Anil Shenoy, Tel. No.: +91-22-61181000 or Email: Anil.Shenoy@morganstanley.com; Grievance officer details: Mr. Anil Shenoy, Tel. No.: +91-22-61181000 or Email: msic-compliance@morganstanley.com; in Canada by Morgan Stanley Canada Limited; in Germany and the European Economic Area where required by Morgan Stanley Europe S.E., authorised and regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin) under the reference number 149169; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, disseminates in the UK research that it has prepared, and research which has been prepared by any of its affiliates, only to persons who (i) are investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Order"); (ii) are persons who are high net worth entities falling within Article 49(2)(a) to (d) of the Order; or (iii) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, as amended) may otherwise lawfully be communicated or caused to be communicated. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and A2X (Pty) Ltd. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia, and is directed at Sophisticated investors only.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client. A distribution of the different MS Research ratings or recommendations, in percentage terms for Investments in each sector covered, is available upon request from your sales representative.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Indicators and trackers referenced in Morgan Stanley Research may not be used as, or treated as, a benchmark under Regulation EU 2016/1011, or any other similar framework.

The issuers and/or fixed income products recommended or discussed in certain fixed income research reports may not be continuously followed. Accordingly, investors should regard those fixed income research reports as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or individual fixed income products.

Morgan Stanley may hold, from time to time, material financial and commercial interests regarding the company subject to the Research report.

Registration granted by SEBI and certification from the National Institute of Securities Markets (NISM) in no way guarantee performance of the intermediary or provide any assurance of returns