

December 9, 2024 05:00 AM GMT

## Canada Economics and Global Macro Strategy | North America

# BoC Preview: Back-to-Back 50bp Cut

We expect another 50bp cut in December as ongoing labor market slack, soft economic growth, and inflation at target allow the BoC to ease aggressively.

**Economics:** At the Bank of Canada's (BoC or the Bank) meeting on [Wednesday, December 11](#) (statement released at 9:45am ET), we expect a 50bp cut by the Bank to lower the policy rate to 3.25%. We also expect the Bank to continue its balance sheet runoff. This meeting will provide an opportunity for the Bank to provide further guidance around the timing and magnitude of future rate cuts. We will also be attentive to how the Bank is thinking about the threat of US tariffs on the Canadian economy.

**Global Macro Strategy:** Our economists think the BoC will cut its policy rate by 50bp at its December meeting, which is in line with market expectations. We see room for markets to price in more cuts into 1H25 as we expect the BoC will cut rates below neutral by summer 2025. We continue to recommend receiving June 2025 BoC.

A dovish BoC is a key reason why we expect CAD to underperform versus other dollar bloc currencies over the next several months. We see upside risks to USD/CAD going into the meeting, as we expect the BoC to continue to have an incrementally more dovish tone. Besides the guidance on future rate cuts, we expect investors to focus on questions around tariff risks and divergence from the Fed during the press conference.

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

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

**For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.**

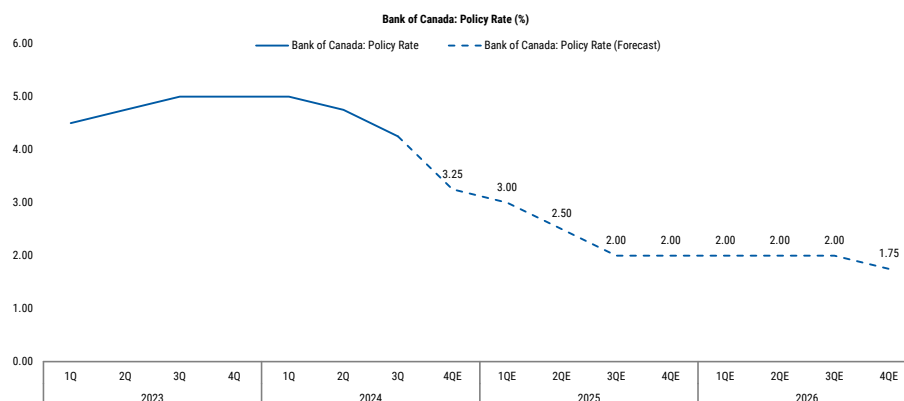
# Canada Economics: Another 50bp Cut

Lenoy Dujon

**We expect the Bank to cut by 50bp at its December meeting to lower the policy rate to 3.25%. With inflation at target and economic activity soft, we believe the BoC can move aggressively in easing monetary policy to lift economic growth.**

**Looking ahead**, still focused on stimulating the economy, we expect the Bank to cut a further 125bp to reach 2.00% by July 2025, where we expect rates to stay through 3Q26. By 4Q26, spillover from **weaker US growth** prompts an additional 25bp cut to 1.75% by end-2026 ([Exhibit 1](#)). We continue to expect QT to end in July 2025.

**Exhibit 1:** We expect a 50bp cut in December 2024 and sequential 25bp cuts thereafter to reach 2.00% in 3Q25; we forecast the policy rate to stay at 2.00% through 3Q26. By 4Q26, spillover from weaker US growth leads to an additional 25bp cut to 1.75% by end-2026



Source: Bank of Canada, Morgan Stanley Research forecasts

**The labor market conditions remain soft.** While employment gains surprised to the upside in [November](#), so did the unemployment rate – rising three tenths to 6.8%, the highest since January 2022. Job growth continues to fail to keep up with the pace of labor supply growth as Canada continues to see high levels of immigration.

**3Q24 GDP growth was below the Bank's [October 2024 MPR](#) forecast.** 3Q24 GDP growth rose 1.0%Q – below the Bank's 3Q24 forecast of 1.5%Q%. While the economy saw pockets of growth in the form of stronger household spending on motor vehicles and financial services, business investment was weak as the effects of tight monetary policy continue to linger.

**Inflation remains firmly in the Bank's 1-3% inflation range.** While headline CPI for October rose 2.0%Y, up from September's pace of 1.6%Y, it remains contained. [Deputy Governor Mendes](#) reiterated that the Bank's inflation target is symmetrical and that it is "equally concerned with inflation above or below 2%."

**Recent BoC communication shows a Bank that is still ready to act on the (soft) data.** [Governor Macklem](#) has said that he wants to lift growth in an effort to "stick the landing". The Bank anticipates reducing "the policy rate further", especially as it remains focused on

supporting growth and keeping inflation around target.

**Lastly on QT – we expect no change to the Bank's current program.** Since confirming its current plan in [March](#), the Bank has pressed ahead with its balance sheet runoff. Based on the maturity profile of its asset holdings, the Bank expects this range to be reached “sometime in 2025.” This remains in line with our expectation for its current QT plan to end in July 2025.

**Risk of tariffs:** In [November 2024](#), President-elect Trump said he plans to impose a 25% tariff on all Canadian (and Mexican) goods entering the US on January 20, 2025. He prefaced the proposal by expressing concerns about migration and drugs illegally entering the US. However, it is unclear whether he intends to proceed with the idea as described, or whether it perhaps was a negotiating tactic meant to extract certain concessions from the two countries.

Like the [Fed](#), the [BoC](#) noted that it will not incorporate the possibility of tariffs into its monetary policy decisions until any tariffs are actually implemented. While there is uncertainty around these tariff proposals at this time, we will be attentive to any additional tariff commentary the Bank may provide.

# Global Macro Strategy: Why Have One 50, When You Can Have Two 50s?

Zoe Strauss, Andrew Watrous

Market pricing is consistent with a roughly ~88% probability of a 50bp rate cut, which our economists expect the BoC to deliver at the December meeting.

We see upside risks to USD/CAD going into the meeting, as we expect the BoC to continue to have an incrementally more dovish tone. We believe CAD will underperform in G10 over the coming months, as further BoC cuts will make CAD's carry profile less attractive ([Exhibit 2](#)).

We think that investors will mostly focus on the press conference. The following three topics will likely be the main areas that investors will pay attention to:

**(1) Guidance on where the BoC sees the trough rate;**

**(2) The BoC's thinking around the monetary policy implications of potential trade tensions;**

**(3) Divergence from the Fed.**

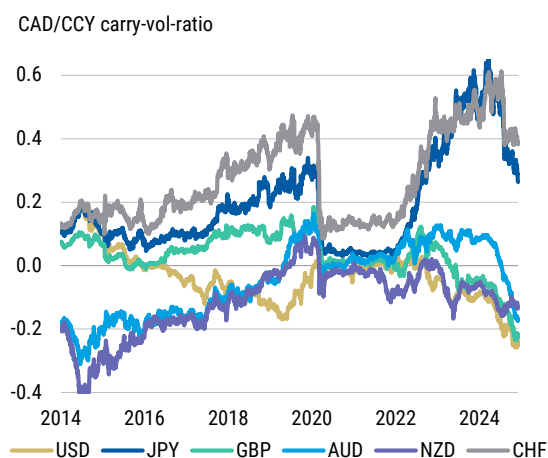
**(1) Trough rate:** So far, the BoC's rationale behind rate cuts has focused on the fact the policy rate does not need to be as *restrictive* as it has been. Consistent with such guidance, market pricing has indicated over the past several months that the BoC will not cut rates below neutral ([Exhibit 3](#)).

However, growth continues to surprise to the downside relative to the BoC's own forecasts (e.g., 1% annualized QoQ in 3Q, versus 1.5% projected by the BoC). We think that the BoC will cut below neutral in 2025 in order for demand to pick up.

The statement will likely continue to contain relatively vague forward guidance, as it did in October ("*the timing and pace of further reductions in the policy rate will be guided by incoming information and our assessment of its implications for the inflation outlook. We will take decisions one meeting at a time*"). However, we will pay attention to whether Governor Macklem acknowledges during the press conference that policy may potentially have to become slightly accommodative in 2025.

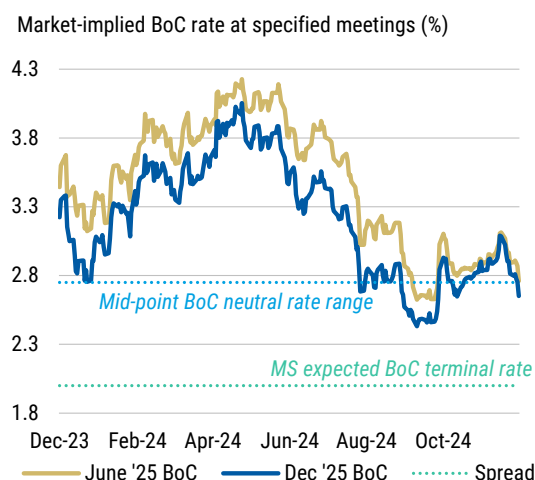
**We continue to recommend receiving June 2025 BoC based on our expectation that the BoC will soon start to guide for rates to possibly move below neutral.**

**Exhibit 2:** CAD's carry profile should weigh on the currency, especially against USD, GBP, AUD, and NZD



Source: Morgan Stanley STIR Desk, Morgan Stanley Research

**Exhibit 3:** Markets do not expect the BoC to cut rates below neutral



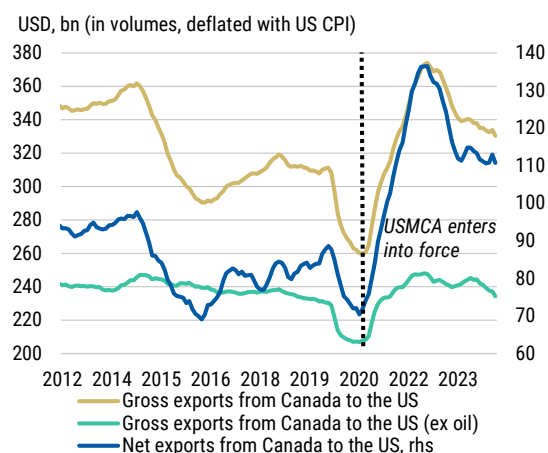
Source: Morgan Stanley STIR Desk, Morgan Stanley Research

**(2) Tariff risks:** We think Governor Macklem may receive questions on the implications for monetary policy given potential trade tensions. Recent [headlines](#) suggested that the incoming US administration may impose tariffs of 25% on all imports from Canada, which - if implemented - could have significant implications for Canadian growth expectations ([Exhibit 4](#)).

Deputy Governor Mendes [mentioned](#) after these headlines that the BoC would only incorporate any potential policies in its outlook if any proposed US tariffs are enacted. Other [central bankers](#) in G10 have made similar comments while highlighting the potential upside risks and downside risks to growth from tariffs.

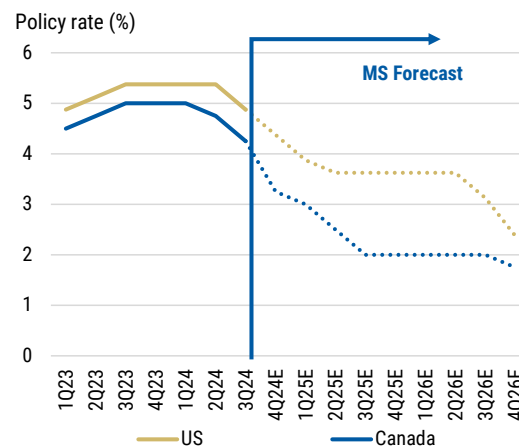
Similarly, the Governor may not provide specific guidance on whether he believes the growth or price impact of potential tariffs will be more important for near-term policy decisions. However, we think Canadian rate expectations should evolve differently compared to the trade escalations in 2018/19.

**Exhibit 4:** Canada has significant trade exposure to the US



Source: Bloomberg, Macrobond, Morgan Stanley Research

**Exhibit 5:** We expect the BoC to continue to cut as the Fed pauses



Source: Macrobond, Morgan Stanley Research forecasts

In 2019, the Fed and other central banks started to cut rates, and a slowdown in global trade was cited as a key factor. In contrast, the BoC did not lower its policy rate during that period (see, for example, [July](#) and [October](#) 2019 MPRs).

However, we don't think that the 2019 episode is a particularly good precedent for how BoC expectations may evolve this time around based on the following:

- Canadian growth was relatively strong in 2019. The output gap had just started to move into negative territory, whereas now the economy has been in excess supply for over a year.
- Policy was already in an accommodative stance, whereas the current policy stance is still restrictive.
- Downside risks to growth may be seen as greater this time if the potential tariffs are broad-based.
- Inflation is back at target, and we think it will remain there. Moreover, CPI ex-mortgage interest costs has been running at or below 2% for almost a year. In other words, with inflation being under control, the bar is being set higher for markets to price out cuts from concerns around inflation than if inflation was still running above target.

We therefore think Canadian rate expectations will likely focus more on the growth aspect than the inflation part of tariffs.

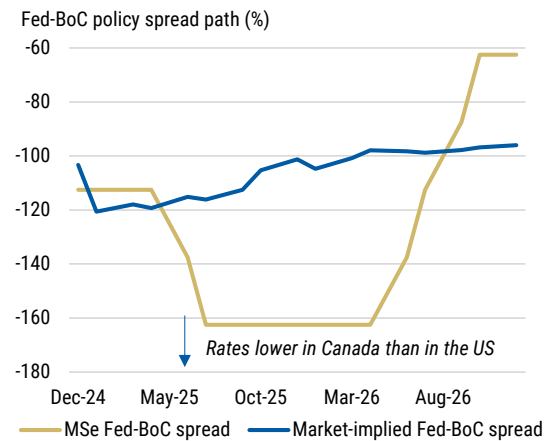
**(3) Divergence:** The BoC has delivered 125bp of rate cuts since it started its cutting cycle in June, compared to 75bp of rate cuts from the Fed. Throughout this divergence, the BoC has consistently said that it is [not close to the limit of diverging](#) from the Fed. Another 50bp rate cut would widen that spread even further ([Exhibit 5](#), [Exhibit 6](#)).

The question around the BoC's divergence "limit" comes up in relation to the exchange rate, as a weaker currency places upward pressure on imported inflation. USD/CAD has increased by ~3% since the beginning of the BoC's cutting cycle ([Exhibit 7](#)).

The central bank's consistent use of the same language around divergence suggests to us that either: 1) the BoC believes the pass-through of a weaker currency is limited (which would be consistent with previous BoC staff research on [exchange rate pass-through to consumer prices](#)); or 2) the BoC may welcome a slightly weaker currency to counterbalance some of the downward pressure on inflation.

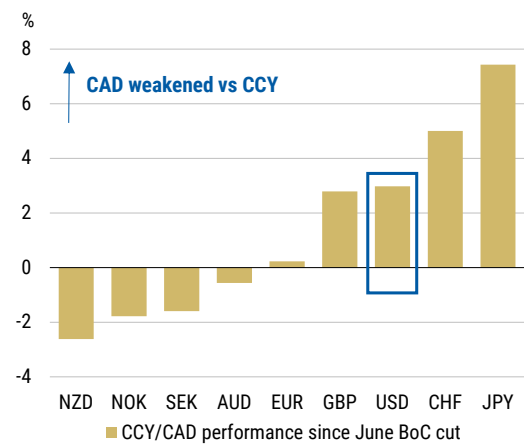
In either case, we interpret the continuity of the BoC's guidance on divergence as a sign that markets can price in further Fed-BoC divergence into 1H25. We therefore expect GoC bonds to outperform US Treasuries over the coming months. (For a more details, please see [2025 Canada Economics & Global Macro Strategy Outlook: The Year of Accommodation](#).)

**Exhibit 6:** Market pricing expects the Fed-BoC policy rate to reach ~120bp in early 2025, compared to our expectation of 162.5bp



Source: Bloomberg, Morgan Stanley Research forecasts

**Exhibit 7:** CAD has weakened around 3% since the BoC started cutting rates



Source: MS STIR Desk, Morgan Stanley Research

• Trade idea: Maintain receive June 2025 BoC at 2.76%

## Valuation Methodology and Risks

TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Receive June 2025 BoC	3.19	9-Aug-24	We believe markets can price in a deeper BoC cutting cycle into 2025. In addition, developments in the Canadian labor market, and the BoC's increased focus on slack in the labor market, should increase the possibility that markets will price in a higher risk premium of front-loaded policy normalization.	A sharp rebound in economic activity in Canada coupled with upside surprises in CPI data.

Source: Morgan Stanley Research



## 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](http://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/conflictolicies](http://www.morganstanley.com/institutional/research/conflictolicies). A Portuguese version of the policy can be found at [www.morganstanley.com.br](http://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 November 30, 2024)

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.

Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1420	38%	356	45%	25%	646	38%
Equal-weight/Hold	1731	46%	367	46%	21%	819	48%
Not-Rated/Hold	5	0%	0	0%	0%	1	0%
Underweight/Sell	593	16%	73	9%	12%	228	13%
Total	3,749		796			1694	

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 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](http://www.morganstanley.com/online/researchdisclosures). For Morgan Stanley specific disclosures, you may refer to [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures).

Each Morgan Stanley research report is reviewed and approved on behalf of Morgan Stanley Smith Barney 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](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](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 Comisión 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 T14FC0118); 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. Tejarshi Hardas, Tel. No.: +91-22-61181000 or Email: tejarshi.hardas@morganstanley.com; Grievance officer details: Mr. Tejarshi Hardas, 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) or by Morgan Stanley & Co. International plc (ADGM Branch), regulated by the Financial Services Regulatory Authority Abu Dhabi (the FSRA), and is directed at Professional Clients only, as defined by the DFSA or the FSRA, respectively. 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 of 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 to investors. Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

The following authors are Fixed Income Research Analysts/Strategists and are not opining on or expressing recommendations on equity securities: Zoe K Strauss; Andrew M Watrous.

The following authors are neither Equity Research Analysts/Strategists nor Fixed Income Research Analysts/Strategists and are not opining on or expressing recommendations on equity or fixed income securities: Lenoy Dujon.

© 2024 Morgan Stanley