February 16, 2024

Commentary

Weekly Economic Perspectives

Contents

01 The Economy

Hot US inflation data jolts markets. Home sales improve in Canada. The UK and Japan slip into technical recession. German investor sentiment improves. The Aussie labor market continues to cool.

09 Week in Review

Spotlight on Next Week

Canadian inflation seen easing. Eurozone manufacturing and services activity may have improved slightly. Australia's wage growth may have slowed.

Contact

Simona Mocuta

Chief Economist simona mocuta@ssga.com +1-617-664-1133

Amy Le

Macro-Investment Strategist amy_le@ssga.com +44-203-395-6590

Krishna Bhimavarapu

Economist

VenkataVamseaKrishna_Bhimavarapu@ssga.com

+91-806-741-5000

The Economy

Hot US inflation data jolts markets as rate cut expectations are delayed and curtailed.

US

The January inflation data came in universally stronger than expected, sending shudders across the market as Fed rate cut expectations were pushed back and curtailed. Depending on how the next couple of months will shape up, this may prove to be either a wise assessment, or an overreaction to yet another bump on the disinflation road. We are leaning towards the latter, while acknowledging the risks. There was an unmistakable air of "start of year" price increases across the entire CPI release for instance, and enough questionable elements in the data that make us expect a reversal to milder prints in coming months.

Percent 10.0 7.5 5.0 3.87 2.93 2.5 1.95 0.0 -1.35 -2.5 -5.0 13 14 15 16 17 18 19 20 21 22 23 12 US Core PCE, % chg y/y US Core PPI, % chg y/y US, Import Prices, ex Petroleum, % chg y/y
 US Core CPI, % chg y/y

Figure 1: January A Bump On, Not The End Of US Disinflation Journey

Sources: Macrobond, SSGA Economics, BLS, GAC, University of Michigan, BEA Updated as of 2/20/2024

But first, the big picture. Overall consumer prices rose 0.3% m/m, a tenth more than expected. This was partly offset by a one tenth downward revision to the December data, allowing the headline inflation rate to moderate three tenths to 3.1% y/y. Food prices increased 0.4% and energy prices declined 0.9%. Things got trickier outside of food and energy as core prices (excluding those two categories) increased 0.4% m/m; this was also a tenth faster than expected and here there was no offsetting revision. The core inflation rate, which had been expected to ease two tenths to 3.7% y/y, was instead unchanged at 3.9% y/y. Housing was the biggest culprit behind the upsides surprise. Fuel and utilities jumped 1.2% m/m—suggesting a degree of "start of year" price hikes. Even worse, shelter costs themselves jumped 0.6%, the most since September. The closely watched owner equivalent rent (OER) was up 0.6%.

And therein lies a multi-faceted problem. To begin with, stickiness in shelter inflation is a problem for the Fed as it ponders when to begin cutting interest rates. At first glance, this data would say "not yet". This is fine as far as March is concerned as that was never fully on the table for us. But we do not think it says "not anytime soon", so

a rate cut in May remains not only viable, but even desirable in our view. The fact is that there are some serious problems with the OER data, the most important of which is that this is not a collection of hard data based on contracted leases. Rather, this comes from a survey of homeowners who are being asked how much they think their house would fetch if it were to be made available for rent. And the universe of respondents is broken down into six sub-groups who are surveyed on a rotating basis twice a year. All this to say that this data is much less rigorous than other components of CPI (except perhaps the health insurance component which is estimated in an equally round-about way) that measure actual selling prices for goods and services. In fact, the component of rent in the CPI that does measure that directly, behaved very differently from OER. On an unrounded basis, it posted the smallest increase since August 2021. In January, the delta between the two was the widest since at least 2000! We expect OER to ease back in the coming months. Elsewhere, medical care services increased 0.7% m/m. This is an area of genuine price pressures as the demand is sticky and hospitals have pricing power. The strength in hotel rates is less convincing and seems likely to ease back. Prices for new vehicles were flat in January and those for used vehicles dropped a large 3.4% m/m. However, there is scope for further moderation in the near term, according to auction price data.

Import prices increased 0.8% m/m in January, bucking expectations of a flat reading. However, this was largely offset by a 0.7% downward revision to the December data. Gains were broad based, with petroleum prices up 2.3% m/m and non-petroleum up 0.6% m/m. Prices excluding food and fuel jumped 0.7%, the most since March 2022, although they remain slightly below year-earlier levels. Import prices from the European Union rose 1.0% m/m (the most since December 2022), but those from China declined 0.3% m/m (the most since July). Overall import prices are down 1.3% y/y.

Producer prices (final demand) closed the hot inflation week with a larger than expected 0.3% m/m increase. The move was entirely a services story, as goods prices declined 0.2% while services jumped 0.6%. The core metrics looked worse, with traditional prices up 0.5% and super-core prices (also excluding volatile trade services) up 0.6% m/m. Headline, core, and super-core PPI inflation stood at 0.9% y/y, 2.0% y/y, and 2.6% y/y, respectively.

Small business sentiment remains soft, and it eroded to an eight-month low in January. The details of the NFIB (National Federation of Independent Businesses) survey were mixed, with sales expectations taking a visible turn lower but firms finding it a little less difficult to find workers. The smallest share of respondents since January 2021 said they've raised prices in the past three months and 33% said they plan to raise wages in the next three months. This is in line with the last several months, although off the recent lows in early 2023. On wages, there was untick in the share of respondents who have recently implemented wage increases (end of year/new year?) but a dip in the share planning to do so in the next three months. Overall, there are no big moves in this report, aside from the plunge in sales expectations, which is a bit puzzling.

The hawkish sentiment that gripped markets in the aftermath of the CPI release was somewhat moderated by the very weak January **retail sales** data. Overall sales dropped 0.8% m/m (versus a much smaller 0.2% anticipated pullback) and the December gain was revised lower by two tenths. Control sales (excluding food

services, building materials, autos dealers and gas stations) fell 0.5% m/m, the first retreat since March 2023. Control sales are now only 2.5% higher than a year earlier, the weakest comparison since an outright decline in April 2020. Perhaps this has something to do with the poor sales expectations in the NFIB survey?

The industrial sector data released this week was mixed and consistent with the idea that the sector is trying to find a bottom. Admittedly, **industrial production** came in weaker than expected with a 0.1% decline and a slight downward revision to the December data. Manufacturing declined 0.5% m/m and mining plunged 2.3% m/m—the most since February 2021. Utilities offered support with a 5.9% m/m bounce. Overall industrial production is flat y/y, so this is far from a revival story.

On the bright side, both the **Empire and Philly Fed manufacturing surveys** improved sharply and more than anticipated in February. We've long been skeptical of the **Empire index** due to its excessive volatility, but this month its improvement was mirrored by the more stable Philly Fed; hence it feels more substantive. Even so, the 41.3-point surge in the Empire survey only unwound two thirds of the big declines recorded in the prior two months, so the signal to noise ratio remains low. The **Philly Fed index** ticked up to a six-month high, but the details were mixed. For instance, the number of employees metric dropped to the lowest level since May 2020. New orders improved but remain on the soft side; the clearest improvement was in shipments, which touched the highest level since August 2022. The price measures rose modestly.

We've been arguing recently that the housing recession is over, and the latest data offer more supporting evidence. January's surge, the **NAHB** (**National Association of Homebuilders**) index rose another 4.0 points in February, with improvements across all subcomponents (buyer traffic, current, and future sales). On the other hand, **housing starts** cratered 14.8% in January, at first glance throwing some cold water on the housing revival narrative. However, there are two attenuating factors. The December data was revised sharply higher to show a 3.3% increase rather than the 4.3% decline initially reported. Most importantly, winter weather likely skewed starts lower last month so we look for some catch-up down the line. Notably, even with the massive decline in January, starts were higher than they were back in August 2023. Reinforcing the "temporary setback" interpretation, **building permits** were little changed during the month (down 1.5%) and single family permits actually rose 1.6% to the highest level since May 2022!

Canada

Home sales show further signs of recovery. **Existing home sales** rose 3.7% m/m in January, following a 7.9% m/m increase in the previous month. Sales were up in the Greater Toronto Area, Hamilton-Burlington, Montreal, Greater Vancouver and the Fraser Valley, Calgary, and most markets in Ontario's Greater Golden Horseshoe and cottage country. New listings were up by 1.5% m/m, but still remained close to the lowest level since last June. With sales rising faster than listings, the sales-to-new listings ratio for January tightened to 58.8%, above the long-term average for the measure of 55%, and up from under 50% just three months earlier.

Manufacturing sales fell 0.7% m/m in December, following a 1.5% increase in January. The decline was led by lower sales of motor vehicles and chemical product. Real sales edged down 0.1% m/m. On a quarterly basis, total sales declined 1.6% in

Q4, mainly due to lower sales in transportation equipment and food subsectors.

UK

Fourth quarter GDP growth slightly undershot expectations, but the details were much more disappointing than we would have expected. Following an unrevised 0.1% contraction in Q3, the economy shrank 0.3% q/q in Q4, worse than expected. Gross fixed capital formation and business investment were the major contributors to the quarterly growth, which added 0.27 percentage points (ppt) and 0.16 ppt to the overall performance. However, all those gains were wiped out by larger falls in net trade and household spending, which detracted 0.63 ppt and 0.08 ppt. Government consumption also detracted 0.06 ppt, reflecting the impact of industrial strikes in health sector. The economy is likely to continue struggling in the first half of the year, but we expect that the second half performance will be boosted by lower interest rates, tax cuts and stronger real wage growth.

Contribution to quarterly GDP growth (ppts) 10.0 7.5 5.0 2.5 0.0 -2.5 -5.0 -7.5 Q1 Q2 Q3 Ω4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 21 22 23 NPISH ■ General Government ■ Household ■ Gross Capital Formation ■ Net Trade

Figure 2. UK Economy Slipped into Recession

Sources:SSGA Economics, ONS

Headline inflation remained stable at 4.0% in January, bucking the BoE and market expectations of an increase to 4.1%. Furniture and household equipment became the largest detractor to the change in annual CPI rate, followed by food and non-alcoholic beverages. Meanwhile, housing and household services made the largest upward contribution, due to the increase in the Ofgem price cap on 1st January. Core inflation was unchanged at 5.1% y/y. Meanwhile, services inflation edged up from 6.4% y/y to 6.5% y/y, but below the BoE's expectations of 6.6%.

The **labor market** remains tight enough to continue delivering stronger than expected wage inflation. Admittedly, growth in average total pay (including bonuses) for the three months to December eased by 0.9 percentage points to 5.8% y/y, but

this was above expectations. Importantly, the decline was largely due to September data dropping out of calculations. Ex bonuses, wage growth also moderated less than expected, from 6.7% to 6.2%. Labor demand is easing only slightly. Headline vacancies in the three months to January fell for the 19th consecutive period but marginally to 932k, from 934k. The unemployment rate eased a tenth to 3.8%.

Eurozone

The preliminary estimate for fourth-quarter eurozone GDP confirmed the advance release showing a flat reading, but we think there is a chance that the final release may bring a one tenth upgrade. *Eurozone* industrial production surged 2.6% m/m in December, trouncing expectations of a small decline. Moreover, the November data was revised higher and now shows a 0.4% monthly gain rather than the 0.3% decline originally reported.

The **Zew index** of **German** investor confidence continues its steady improvement trend of the past half a year. The headline rose 4.7 points to 19.9k, the highest level since February 2022. It is a slow healing process following the massive competitiveness hit as a result of the Ukraine war, but it is a healing nonetheless.

Japan

Japan's economy slipped into a technical recession in Q4 2023, in line with our out of consensus forecast. GDP declined 0.1% q/q, translating into a decline of 0.4% when annualized. However, nominal GDP improved by 0.3% q/q after stalling in Q3. The GDP deflator remained elevated at 3.8% y/y (5.2% in Q3) as the private consumption deflator remained high at 2.7% (3.1%).

Private consumption contracted for the third quarter by 0.2% q/q; durable goods consumption was up 6.4% q/q, while declines were registered for semi-durables, non-durables and also services. Real employee compensation edged up just 0.1% after a 1.0% decline in Q3 (household expenditure deflator was up 0.3%); for the whole year though, it declined 1.8%, faster than in 2022. On balance, a key improvement is that the nominal compensation in Q4 improved by 0.4%, after declining 0.2% in Q3. So, if the same nominal level of activity endures and the price level recedes due to disinflation, there is a potential for sharp improvement.

For us, the real surprise was the broad-based contraction in capital expenditure (-0.3%), another third consecutive quarterly decline. Nominally though, it improved for a seventh quarter at 0.3%, so we are left wondering if it is the price level that depressed it, and if investments could contribute positively ahead on disinflation.

Real exports and imports rose 2.6% q/q and 1.7% respectively; the positive delta resulted in a critical net contribution of 0.2 ppts to sequential GDP growth. Like we have been pointing out, 2.4 ppts of rise in exports came from services, but inbound tourism contributed less than we expected at 0.6 ppts, and the remainder was actual services exports, so there is healthy demand for both goods and services exports.

All in all, this technical recession is precisely just technical. We expect a revival ahead due to disinflation and better wage growth and suspect if the Bank of Japan (BoJ) shares our view. Governor Ueda on Friday offered optimism carefully without mentioning GDP data; he now expects wages to rise above inflation in 2025 as well,

so the bank thinks real wages could improve for two successive years.

JPY, trillion 310 290 270 250 230 JPY, trillion 35 25 15 5 -5 -15 94 96 98 OΩ 02 04 06 N8 10 12 14 16 18 20 22 Current Prices — Constant Prices Difference Due To Inflation

Figure 3: Compensation Of Employees Dragged By Inflation In Japan

Sources: SSGA Economics, CAO, Macrobond Updated as of 2/20/2024

All in all, the data was in line with our expectations and may not deter the BoJ's confidence. Hence, we maintain our base case for the BoJ to exit negative interest rates in April. Next week, we expect January exports to rise strongly, while machinery orders may expand again in December.

Australia

Employment increased by just 500 in January (seasonally adjusted, sa), below our already softer-than-the-consensus forecast of 15k, as the labor market continued to cool. Seasonal factors played a hand and the ABS noted that an unusually large number of people waited to start their employment. The number of marginally attached individuals to the labor force (currently outside of the labor force but looking to rejoin the labor market) has been on the rise since a few years. This artificially depressed the labor force participation rate. Meanwhile, the unemployment rate ticked up 0.2 ppts to 4.1%.

Still, the labor market is cooling rapidly - full-time non-seasonally adjusted (nsa) employment grew just 108.4k annually, and is down 83.9% from its peak in October 2022. Furthermore, hours worked declined by 2.5% m/m, and are now below employment growth. Measured annually, they fell to 0.7% y/y from 10.0% last January, so labor demand may have softened.

This cooling is amplified by seasonal noises; full-time nsa employment contracted 25k sequentially, while the sa version rebounded 'just' 11.1k, making the difference the highest on record at 111.4k.

% Range Mean of past cycles — Current

100
50
-100
-150
-12 -10 -8 -6 -4 -2 0 2 4 6 8 10 12 14 16 18 20 22 24

Figure 4: Aussie Labor Market Is Cooling Fast

months to/from peak y/y growth rate in full time employment (nsa)

Source: SSGA Economics, ABS, Macrobond Updated as of 2/20/2024

Business conditions eased further in January, as the headline NAB index declined two points to 6.0. The decline was broad based, but measures of prices and, leading indicators of employment continued to slow. **Consumer sentiment** improved to 86.0, but remained near historic lows and is 16% below the long-run average. Improvements were across the board with an 8.7% m/m improvement in perceived economic conditions over the 12 months and 4.9% rise in family finances compared to a year ago. If incoming data continues to improve, we will be on track for the first interest rate cut in August.

Next week, we expect the wage price index's growth to have slowed a touch from 4.1% in Q3.

Week in Review (Feb 12 - Feb 16)

| Country | Release (Date, format) | Consensus | Actual | Last | Comments |
|-------------------|---|-----------|--------|-----------|---|
| Monday, Feb 12 | | | | | |
| US | Monthly Budget Statement (Jan, \$ bn) | -21.0 | -21.9 | -38.8 | As expected. |
| JN | PPI (Jan, y/y) | 0.1% | 0.2% | 0.2% (†) | Pipeline pressures are alive. |
| AU | Westpac Consumer Conf Index (Feb) | na | 86.0 | 81.0 | Good improvements. |
| AU | NAB Business Confidence (Jan) | na | 1.0 | 0.0 (↑) | Good improvements. |
| Tuesday, Feb 13 | | | | | |
| US | NFIB Small Business Optimism (Jan) | 92.3 | 89.9 | 91.9 | Deteriorating sales expectations. |
| US | CPI (Jan, y/y) | 2.9% | 3.1% | 3.4% | Broad upside surprise. |
| UK | ILO Unemployment Rate (Dec, 3m) | 4.0% | 3.8% | 3.9% | Is unemployment underestimated? |
| UK | Average Weekly Earnings (Jan, y/y) | 5.6% | 5.8% | 6.7% (†) | Wage inflation is still strong. |
| GE | ZEW Survey Expectations (Feb) | 17.3 | 19.9 | 15.2 | Steady improvement. |
| FR | ILO Unemployment Rate (Q4) | 7.3% | 7.3% | 7.2% | As expected. |
| Wednesday, Feb 14 | | | | | |
| CA | Existing Home Sales (Jan, m/m) | na | 3.7% | 8.7% | Continue recovering. |
| UK | CPI (Jan, y/y) | 4.1% | 4.0% | 4.0% | Welcome surprise. |
| EC | GDP (Q4, q/q, prelim) | 0.0% (p) | 0.0% | -0.1% | Could it be revised higher? |
| EC | Industrial Production (Dec, m/m) | -0.2% | 2.6% | 0.4% (↑) | Big upsides surprise and revision. |
| JN | GDP (Q4, q/q, prelim) | 0.2% | -0.1% | -0.8% (↓) | Technical recession, but technical only. |
| JN | Industrial Production (Dec, m/m, final) | 1.8% (p) | 1.4% | -0.9% | Good. |
| JN | Capacity Utilization (Dec, m/m) | na | -0.1% | 0.3% | Good. |
| AU | Employment Growth (Jan, thous) | 25.0 | 0.5 | -62.7 (†) | The labor market is cooling rapidly. |
| AU | Unemployment Rate (Jan) | 4.0% | 4.1% | 3.9% | The labor market is cooling rapidly. |
| Thursday, Feb 15 | | | | | |
| US | Empire Manufacturing (Feb) | -12.5 | -2.4 | -43.7 | Very volatile. |
| US | Retail Sales Advance (Jan, m/m) | -0.2% | -0.8% | 0.4% (↓) | Control sales declined 0.4%. |
| US | Philadelphia Fed Business Outlook (Feb) | -8.1 | 5.2 | -10.6 | Supports the idea of manufacturing bottoming. |
| US | Import Price Index (Jan, y/y) | -1.3% | -1.3% | -2.4% (↓) | But stronger than expected m/m. |
| US | Initial Jobless Claims (Feb 10, thous) | 220 | 212 | 220 (†) | Very low. |
| US | Continuing Claims (Feb 03, thous) | 1,880 | 1,895 | 1,865 (↓) | Still very low. |
| US | Industrial Production (Jan, m/m) | 0.2% | -0.1% | 0.0% (↓) | Manufacturing and mining were down. |
| US | Business Inventories (Dec, m/m) | 0.4% | 0.4% | -0.1% | No surprises. |
| US | NAHB Housing Market Index (Feb) | 46.0 | 48.0 | 44.0 | Housing recession is over. |
| CA | Housing Starts (Jan, thous) | 235.0 | 223.6 | 249.0 (↓) | Weakening. |
| CA | Manufacturing Sales (Dec, m/m) | -0.6% | -0.7% | 1.5% (↑) | Weak. |
| UK | Industrial Production (Dec, m/m) | -0.1% | 0.6% | 0.5% (†) | OK. |
| UK | GDP (Q4, q/q, prelim) | -0.1% | -0.3% | -0.1% | Deeper-than-expected contraction. |
| JN | Tertiary Industry Index (Dec, m/m) | 0.2% | 0.7% | -1.4% (↓) | Good for future production. |
| Friday, Feb 16 | | | | | |
| US | Housing Starts (Jan, thous) | 1,460 | 1,331 | 1,460 | Weather-related setback. |
| US | Building Permits (Jan, thous) | 1,512 | 1,470 | 1,493 (↓) | Single family home permits rose. |
| US | PPI Final Demand (Jan, y/y) | 0.6% | 0.9% | 1.0% | Hot services and core. |
| US | U. of Mich. Sentiment (Feb, prelim) | 80.0 | 79.6 | 79.0 | Largely as initially reported. |
| UK | Retail Sales Inc Auto Fuel (Jan, m/m)_ | 1.5% | 3.4% | -3.3% (↓) | Very strong. |
| FR | CPI (Jan, y/y, final) | 3.1% (p) | 3.1% | 3.7% | As initially reported. |

Source: for data, Bloomberg®; for commentary, SSGA Economics.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 29 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we have become the world's fourth-largest asset manager* with US \$3.8 trillion† under our care.

^{*} Pensions & Investments Research Center, as of December 31, 2022.

[†] This figure is presented as of June 30, 2023, and includes approximately \$63 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

ssga.com

Marketing Communication Important Risk Discussion

Investing involves risk including the risk of loss of principal.

All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability, or completeness of, nor liability for, decisions based on such information, and it should not be relied on as such.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

The whole or any part of this work may not be reproduced, copied, or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

The views expressed in this material are the views of SSGA Economics Team through the period ended Feb 16, 2024 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation. This means that this marketing communication.

(a) has not been prepared in accordance with legal

requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This communication is directed at professional clients (this includes eligible counterparties as defined by the "appropriate EU regulator" who are deemed both knowledgeable and experienced in matters relating to investments. The products and services to which this communication relates are only available to such persons and persons of any other description (including retail clients) should not rely on this communication.

Intellectual Property Information

BLOOMBERG®, a trademark and service mark of Bloomberg Finance L.P. Standard & Poor's S&P 500 Index® is a registered trademark of Standard & Poor's Financial Services LLC. FTSE 100® is a trademark jointly owned by the London Stock Exchange Plc and The Financial Times Limited, and is used by FTSE International Limited under license. "All-World", "All-Share" and "All-Small" are trademarks of FTSE International Limited.

Australia: State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services License (AFSL Number 238276). Registered office: Level 14, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240-7600. F: +612 9240-7611.

Hong Kong: State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200.

Japan: State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan. T: +81-3-4530-7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345), Membership: Japan Investment Advisers Association, The Investment Trust Association, Japan, Japan Securities Dealers' Association.

Singapore: State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826-7555. F: +65 6826-7501.

Abu Dhabi: State Street Global Advisors Limited, ADGM branch is regulated by the Financial Services Regulatory Authority (FSRA). This document is intended for Professional Clients or Market Counterparties only as defined by the FSRA and no other person should act upon it.

State Street Global Advisors Limited, ADGM Branch, Al Khatem Tower, Suite 42801, Level 28, ADGM Square, Al Maryah Island, P.O Box 76404, Abu Dhabi, United Arab Emirates. Regulated by the ADGM Financial Services Regulatory Authority. T: +971 2 245 9000.

Belgium: State Street Global Advisors Belgium, Chaussée de La Hulpe 185, 1170 Brussels, Belgium. T: +32 2 663 2036. State Street Global Advisors Belgium is a branch office of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2.

France: State Street Global Advisors Europe Limited, France Branch ("State Street Global Advisors France") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors France is registered in France with company number RCS Nanterre 899 183 289, and its office is located at Coeur Défense - Tour A - La Défense 4, 33e étage, 100, Esplanade du Général de Gaulle, 92 931 Paris La Défense Cedex, France. T: +33 1 44 45 40 00. F: +33 1 44 45 41 92.

Germany: State Street Global Advisors Europe Limited, Branch in Germany, Brienner Strasse 59, D-80333 Munich, Germany ("State Street Global Advisors Germany"). T +49 (0)89 55878 400. State Street Global Advisors Germany is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2.

Ireland: State Street Global Advisors Europe Limited is regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered Number: 49934. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300.

Italy: State Street Global Advisors Europe Limited, Italy Branch ("State Street Global Advisors Italy") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Italy is registered in Italy with company number 11871450968 - REA: 2628603 and VAT number 11871450968, and its office is located at Via Ferrante Aporti, 10 -20125 Milan, Italy. T: +39 02 32066 100. F: +39 02 32066 155.

Netherlands: State Street Global Advisors Netherlands, Apollo Building 7th floor, Herikerbergweg 29, 1101 CN Amsterdam, Netherlands. T: +31 20 7181 000. State Street Global Advisors Netherlands is a branch office of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2.

Switzerland: State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16.

United Kingdom: State Street Global Advisors Limited. Authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 5776591 81. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350.

Canada: State Street Global Advisors, Ltd., 1981 McGill College Avenue, Suite 500, Montreal, Qc, H3A 3A8, T: +514 282 2400 and 30 Adelaide Street East Suite 800, Toronto, Ontario M5C 3G6. T: +647 775 5900.

United States: State Street Global Advisors, 1 Iron Street, Boston, MA 02210-1641.

© 2024 State Street Corporation. All Rights Reserved. 2537623.227.1.GBL.RTL Exp. Date: 02/28/2025