January 6, 2023
Commentary

Weekly Economic Perspectives

Contents

Spotlight on Next Week
Inflation seen retreating sharply in the US. Japan's Tokyo CPI seen closing in on 4.0%. Australian retail sales to improve.

Contact

Simona Mocuta
Chief Economist
simona_mocuta@ssga.com
+1-617-664-1133

Krishna Bhimavarapu
Economist
VenkataVamseaKrishna_Bhimavarapu@ssga.com
+91-806-741-5000

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

The Economy

Signs of easing inflationary pressures lift markets late in the week.

US

We absolutely loved the December employment report! To us, it was the perfect embodiment of the soft landing narrative, showing robust employment growth alongside noticeably slower wage inflation. What's not to like? We had long argued that—while not easy—it is also not impossible to straddle that line, so it is nice to see data supporting this glass half full interpretation of the macro dynamics. Evidently, we need these signals to be repeated in future reports, but we'll take this win.

The establishment report showed a 223,000 increase in **employment**, 220,000 of which came from the private sector; this was accompanied by a modest 28,000 downward revision to the prior two months. With the exception of the pullback in government employment, there were no major changes in the industry composition. That said, the improvement in retail trade seems unconvincing (i.e., not sustainable), and the slight decline in information services may be the first indication of a broader pullback in hiring in that space. We also noted faster declines in temporary help, though it is unclear whether this still functions as the typical indicator of slowing labor demand that it has been in the past, or whether this is simply because people can easily find permanent employment and have no need to settle for temporary jobs.

The household report showed a 717,000 surge in employment, which was partly a bounce from very weak readings in recent months and partly volatility associated with the series. Nonetheless, with the labor force increasing by 439,000 and unemployment dropping by 278,000, the **unemployment rate** dipped a tenth to 3.5%.

Figure 1: Moderation In US Average Hourly Earnings Inflation Continues

Sources: Macrobond, SSGA Economics, BLS

The best part of the report was precisely what had seemed most troublesome the month before, namely wages. Total average hourly earnings (AHE) rose 0.3% in December, a tenth less than expected, but the biggest news were the downward revisions to the prior two months. **Average hourly earnings** for production and non-supervisory employees increased just 0.2% m/m, the least since January 2021. The entirety of these updates allowed total AHE inflation to decelerate two tenths to 4.6% y/y and AHE inflation for production and non-supervisory employees to decelerate five tenths to 5.0% y/y, the lowest levels since August and June 2021, respectively.

To be sure, it is quite possible that sequential wage gains may reaccelerate from December's levels. However, we do believe the broad trend remains one of continued moderation. We now have enough data in hand to support the idea that average weekly hours have sustainably peaked. We take this to mean that employers are making less intensive use of existing labor resources and by doing so imply that they are less eager (we might have used the word "desperate") to add to payrolls. In turn, this should diminish wage pressures at the margin and help further reduce wage inflation over the course of 2023. And one final point on wage inflation: we do not think it needs to go all the way back to pre-Covid levels, when it was seen as too low to be consistent with the 2.0% inflation target. Moving into the 3.5-4.0% range would be a great outcome in our view and we think that's achievable.

For the time being, labor demand still greatly exceeds labor supply. Despite a slight retreat in November, upward revisions left **job openings** at 10.458 million, above where we thought they stood in October. Even so, the data clearly imply slowing labor demand. Hiring eased to the lowest level since February 2021 and the hiring rate dipped to the lowest since April 2020. Admittedly, the number of quits rose to a three-month high, suggesting that workers remain confident about the prospects for finding a new job. This dynamic is corroborated by the Conference Board labor differential, as well as by the Atlanta Fed wage tracker data, which show a very high favorable wage differential for job switchers. In other words, incentives to quit are still very high and so it is not shocking to see workers act accordingly. That said, job openings are easing across all establishment sizes. They peaked first at large firms (1,000+ employees, in late 2021), then at medium size firms (50-999 employees, in March 2022) and eventually at smaller firms (under 50 employees, in May 2022). The compositional shift in jo openings, with a growing share accounted by small firms with lesser ability to compete aggressively on wages, is one of the factors that should aid the process of moderating wage inflation even if employment levels remain elevated.

The rest of the macro data for the week were on the disappointing side, insofar as they highlight softening demand conditions across the board. The rest of the macro data for the week were on the disappointing side, insofar as they highlight softening demand conditions across the board. The **ISM manufacturing index** dipped deeper into contraction territory, easing 0.6 point to 48.6. The production metric dropped 3.0 points to 48.5, new orders dipped 2.0 points to 45.2 and the price metric declined 3.6 points to 39.4, the lowest level since April 2020. The good news was that employment rebounded 3.0 points to 51.4.

By far the biggest negative surprise this week came from the **non-manufacturing ISM index** which plunged 6.9 points to 49.6, the biggest monthly drop since April 2020 and the lowest level since May 2020. We had anticipated a pullback in the index at some point—given its growing outperformance relative to the S&P services PMI, but the declines in both the headline and some of the sub-components were bafflingly large, so we are not quite sure what to make of this abrupt change. For instance, the new order measure collapsed 10.8 points to 45.2. The 10-point drop in the business activity metric—the old headline—is somewhat less confusing as it simply gives back the surprising bounce the month before and marks only a seven-month low. Employment dipped back into contraction territory at 49.8 and the price metric moderated 2.4 points to 67.4. While still historically very high, this marked the lowest print since January 2021.

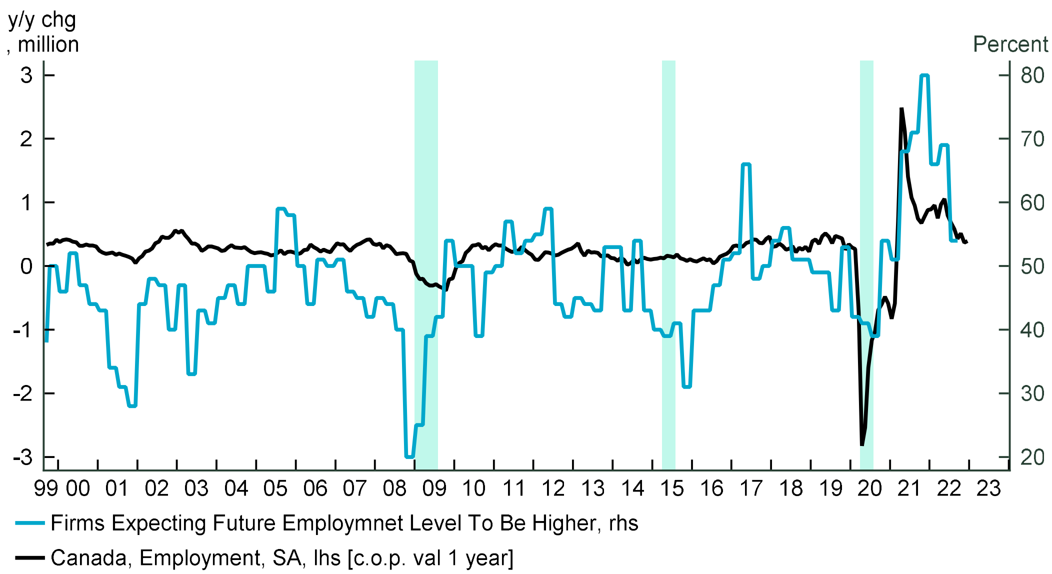
Cooler demand was also clear in the factory orders data. **Factory orders** dropped 1.8% in November, the largest monthly decline (and only the fourth) since April 2020. While factory orders remained 7.3% higher than a year earlier, the 3m/3m annualized growth rate turned negative for the first time since July 2020. Slowing demand is one of the factors behind the improving supply times reported in manufacturing surveys.

Canada

For the second time in three months, the **labor market** added an explosive number of new jobs. There were 104,000 more people employed in December, more than ten times expectations; 81% of whom were in permanent positions. The unemployment rate ticked down a tenth to 5.0%, near last July's historic low of 4.9%.

Nonetheless, the implications on the Bank of Canada (BoC) are limited for three crucial reasons. One, the participation rate has increased to 65.0% from 64.8%. Two: the average hourly wage growth ticked down to 5.1% y/y from 5.6% in November (although this is the seventh month above 5%). And three: the annual change in employment has fallen to 394.1 thousand from the post-pandemic (from March 2021) average of 918.6 thousand, very much in line with the BoC's Q3 Business Outlook Survey (BOS).

Figure 2: Canada: Employment Is Mean-Reverting



Sources: SSGA Economics, BoC, StatCan

Furthermore, the economy is likely strongly feeling the lagged impact of 400 bps of rate hikes, as evidenced by the **Ivey PMI**, which fell to 33.4 in December. This is the third lowest reading on record; the employment sub-component has also ticked down 4.5 pts to 49.8, and inventories deteriorated for the seventh month to 43.5.

Looking ahead, in the next week will learn about the **BoC's Q4 BOS** results, and **November building permits** data, both of which may point to an impending slowdown. The December CPI data is due to come on January 17, ahead of the BoC meeting a week later, but this week's data point strongly to the BoC hiking its overnight target rate by 25 bps to 4.50% this month.

UK

Mortgage approvals tumbled to 46,10 in November, down from October's downwardly revised 57,9000 print. The number of mortgage approvals is now down by more than half from the peak levels of late 2020 as well as materially below levels prevailing in the year before the pandemic. Clearly, the combination of higher interest rates is working as expected in dampening demand.

Eurozone

The preliminary December **inflation data** brought the first convincing evidence that eurozone inflation has peaked. Admittedly, policy actions directly aimed at easing the energy price shock flattered the figures, but the totality of the data still suggest the peak has passed. ***German*** **CPI inflation** eased markedly from 10.0% y/y in November to 8.6% y/y in December, while ***French*** **CPI inflation** eased three tenths to 5.9% y/y ***Italian*** **CPI inflation** eased two tenths to 11.6% y/y.

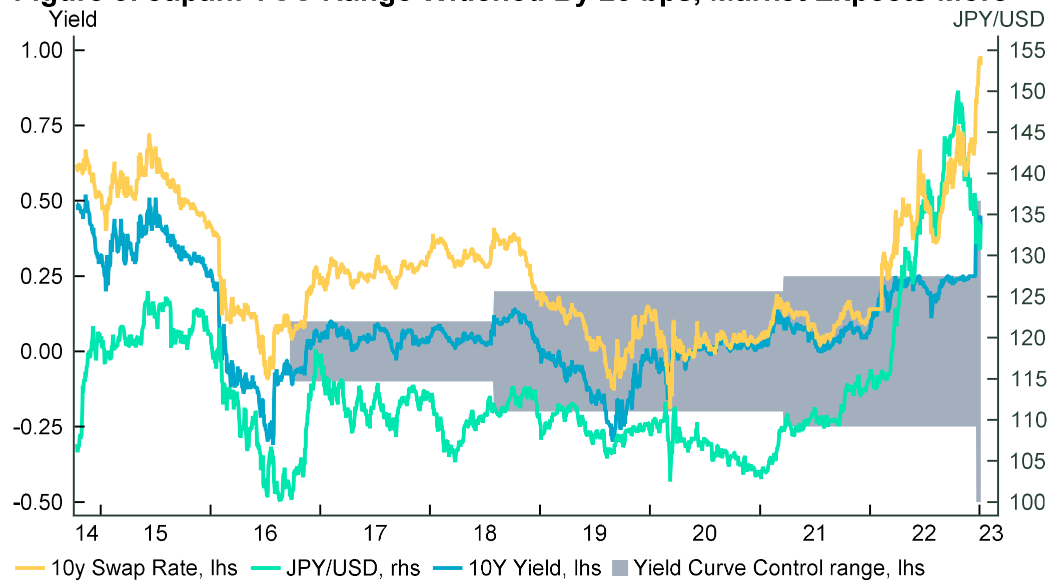
Elsewhere, final readings on the region's purchasing managers index suggest some resilience in activity. For instance, the ***eurozone*** **composite PMI** settled at 49.3 in December, half a point better than initially reported and 1.5 points higher than in November. The **manufacturing PMI** improved 0.7 point to 47.8, but the much bigger boost came from the **services PMI** which improved 1.3 points to 49.8. This was the first gain in the services PMI since April so it is note-worthy.

Japan

The Bank of Japan (BoJ) widened its **Yield Curve Control (YCC) target band** on either side by 25 bps, thereby allowing the 10y JGB yield to rise to 0.50%, in line with our expectations. However, this caught the market by surprise, and the outlook has gotten considerably cloudy, with the market expecting another YCC tweak or outright removal of the policy.

However, we do not expect the bank to move aggressively, at least not until April. This is primarily due to two reasons: one; there are three board positions to be filled – for Governor Haruhiko Kuroda in April and two positions for deputy governors Masayoshi Amamiya and Masazumi Wakatabe in March. Deputy governor Wakatabe is a known dove, and his replacement is of interest which determines the direction of policy. And two, there is considerable uncertainty regarding wage growth, with more clarity on the shunto wage negotiations only coming in March.

Figure 3: Japan: YCC Range Widened By 25 bps, Market Expects More



Sources: SSGA Economics, Macrobond

Case in point, **total cash earnings** rose just 0.5% y/y in November, after a downwardly revised 1.4% in October. Scheduled payments rose firmly by 1.5% (1.0% in October), notably in the part-time category reflecting the higher minimum wage. The trend remains firm, with the trailing three months' annual growth averaging 1.5%, much higher than the pre-pandemic average of 0.6%. However, real earnings dropped 3.8% y/y, the eighth successive decline and largest drop in eight years. We are nonetheless optimistic that wages are rising and that the Shunto wage negotiations will result in a positive result in March.

Consumer confidence rose for the first time in four months in December by 1.7 points to 30.3. Improvement was broad-based, but we especially noted the 2.6-point rise in employment. Inflation expectations remain high. Although the Cabinet Office maintained the assessment as “weakening”, if the sentiment had bottomed, it is likely that consumer spending may get a shot in the arm as the economy normalizes, especially as the willingness to buy durable goods rose 2.3 points in December.

The final reading of **manufacturing PMI** confirmed the initial contraction. The final reading came in at 48.9, 0.1 points above the prelim, but the reading is still the lowest since October 2020, as both output and new orders contracted for a sixth month. Input price inflation has cooled to a 15-month low. The report overall is concerning as the forward-looking future output index is at its lowest since May.

We expect next week’s **Tokyo CPI** to show the headline rising to 3.9% y/y in December and the **real household consumption expenditure** likely rose more than consensus expectations of 0.5% y/y. The BoJ branch managers meet next week, and we expect inflation to be discussed heavily in the regional economic report. We will also look out for any valuable leading information about the BoJ leadership change.

Australia

No major data releases.

Week in Review (January 02 – January 06)

Country	Release (Date, format)	Consensus	Actual	Last	Comments
Monday, January 02					
EC	Manufacturing PMI (Dec, final)	47.8 (p)	47.8	47.1	Nothing really new.
GE	Manufacturing PMI (Dec, final)	47.4 (p)	47.1	46.2	Nothing really new.
FR	Manufacturing PMI (Dec, final)	48.9 (p)	49.2	48.3	Nothing really new.
IT	Manufacturing PMI (Dec, final)	48.6 (p)	48.5	48.4	Nothing really new.
Tuesday, January 03					
UK	Manufacturing PMI (Dec, final)	44.7 (p)	45.3	46.5	Nothing really new.
GE	Unemployment Claims Rate (Dec, sa)	5.6%	5.5%	5.5% (↓)	Resilient.
GE	CPI (Dec, y/y, prelim)	9.0%	8.6%	10.0%	Relief on energy.
JN	Manufacturing PMI (Dec, final)	48.8 (p)	48.9	49.0	Slowing.
Wednesday, January 04					
US	ISM Manufacturing (Dec)	48.5	48.4	49.0	Price pressures easing.
US	JOLTS Job Openings (Nov, thous)	10,050	10,458	10,512 (↑)	Very elevated, but trend is lower.
US	Wards Total Vehicle Sales (Dec, mn)	13.40	13.31	14.14	Five-month low. Will weigh on retail sales.
UK	Mortgage Approvals (Nov, thous)	53.0	46.1	57.9 (↓)	Big pullback.
EC	Composite PMI (Dec, final)	48.8 (p)	49.3	47.8	Welcome resilience.
EC	Services PMI (Dec, final)	49.1 (p)	49.8	48.5	Welcome resilience.
GE	Services PMI (Dec, final)	49.0 (p)	49.2	46.1	Welcome resilience.
FR	CPI (Dec, y/y, prelim)	6.4%	5.9%	6.2%	Encouraging.
FR	Consumer Confidence (Dec)	84	82	83	Bottoming.
Thursday, January 05					
US	Initial Jobless Claims (Dec 31, thous)	225	204	223 (↓)	Still very low.
US	Continuing Claims (Dec 24, thous)	1,728	1,694	1,718 (↑)	Brief pullback, but trend seems higher.
UK	Services PMI (Dec, final)	50.0 (p)	49.9	48.8	Welcome resilience.
IT	CPI NIC incl. tobacco (Dec, y/y, prelim)	11.6%	11.6%	11.8%	
JN	Consumer Confidence Index (Dec)	28.3	30.3	28.6	Welcome improvement.
JN	Labor Cash Earnings (Nov, y/y)	1.7%	0.5%	1.4% (↓)	Positively scheduled earnings rose
Friday, January 06					
US	Change In Nonfarm Payrolls (Dec, thous)	200	223	256 (↓)	Labor demand still robust.
US	Unemployment Rate (Dec)	3.7%	3.5%	3.7%	Wage inflation slowed noticeably.
US	ISM Services Index (Dec)	55.0	49.6	56.5	Big miss…
US	Factory Orders (Nov, m/m)	-1.0%	-1.8%	0.4% (↓)	Demand erosion visible here.
US	Durable Goods Orders (Nov, m/m, final)	-2.1% (p)	-2.1%	1.0%	Up 6.2% y/y, least since Feb 2021.
CA	Employment Change (Dec, thous)	8.0	104	10.1	Another big beat.
CA	Unemployment Rate (Dec)	5.2%	5.0%	5.1%	Higher participation caused it.
CA	Ivey PMI (Dec, sa)	na	33.4	51.4	Concerning.
GE	Retail Sales (Nov, m/m)	1.5%	1.1%	-2.8%	But down a big 5.9% y/y.
GE	Factory Orders (Nov, m/m)	-0.5%	-5.3%	0.6% (↓)	Ouch! But this is fairly volatile series.
FR	Consumer Spending (Nov, m/m)	1.1%	0.5%	-2.7% (↑)	Down 5.2% y/y.

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

Week In Preview (January 09 – January 13)

Country	Release (Date, format)	Consensus	Last	Comments
Monday, January 09				
US	Consumer Credit (Nov, $, bn)	25.000	27.078	
CA	Building Permits (Nov, m/m)	na	-1.4%	Could be falling.
GE	Industrial Production (Nov, m/m, sa)	0.3%	-0.1%	
IT	Unemployment Rate (Nov)	7.8%	7.8%	
Tuesday, January 10				
US	NFIB Small Business Optimism (Dec)	91.5	91.9	Watch wage intentions.
FR	Industrial Production (Nov, m/m)	0.6%	-2.6%	
JP	Household Spending (Nov, y/y)	0.5%	-0.4% (↓)	May rise.
JP	Tokyo CPI (Dec, y/y)	4.0%	3.7% (↓)	Could continue rising.
AU	Retail Sales (Nov, m/m)	0.7%	-0.2%	Could rise ahead of holiday shopping.
Wednesday, January 11				
IT	Retail Sales (Nov, m/m)	na	-0.4%	
Thursday, January 12				
US	CPI (Dec, y/y)	6.5%	7.1%	Driven by plunging gas prices.
US	Initial Jobless Claims (Jan 07, thous)	218	204	
US	Continuing Claims (Dec 31, thous)	1718	1,694	
US	Monthly Budget Statement (Dec, $,bn)	-70.0	-248.5	
Friday, January 13				
US	Import Price Index (Dec, y/y)	2.1%	2.7%	
US	U.of Mich. Sentiment (Jan, prelim)	60.3	59.7	
UK	Industrial Production (Nov, m/m)	-0.3%	0.0%	
EC	Industrial Production (Nov, m/m, sa)	0.5%	-2.0%	
FR	CPI (Dec, y/y, final)	5.9% (p)	6.2%	
IT	Industrial Production (Nov, m/m)	0.3%	-1.0%	

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

Economic Indicators

Central Bank Policy Targets

Region	Target	Year/Year % Change in Target				
		Jul	Aug	Sep	Oct	Nov
US	Target: PCE price index 2.0% y/y	6.4	6.3	6.3	6.1	5.5
Canada	Target: CPI 2.0% y/y, 1.0%-3.0% control range	7.6	7.0	6.9	6.9	6.8
UK	Target: CPI 2.0% y/y	10.1	9.9	10.1	11.1	10.7
Eurozone	Target: CPI below but close to 2.0% y/y	8.9	9.1	9.9	10.6	10.1
Japan	Target: CPI 2.0% y/y	2.6	3.0	3.0	3.7	3.8
Australia	Target Range: CPI 2.0%-3.0% y/y	7.3	7.3	7.3		

Source: Macrobond

Key Interest Rates

	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
US (top of target range)	0.25	0.50	0.50	1.00	1.75	2.50	2.50	3.25	3.25	4.00	4.50
Canada (Overnight Rate)	0.25	0.50	1.00	1.00	1.50	2.50	2.50	3.25	3.75	3.75	4.25
UK (Bank Rate)	0.50	0.75	0.75	1.00	1.25	1.25	1.75	2.25	2.25	3.00	3.50
Eurozone (Refi)	0.00	0.00	0.00	0.00	0.00	0.50	0.50	1.25	1.25	2.00	2.50
Japan (OCR)	-0.01	-0.02	-0.02	-0.03	-0.04	-0.01	-0.04	-0.07	-0.06	-0.08	-0.02
Australia (OCR)	0.10	0.10	0.10	0.33	0.73	1.28	1.81	2.25	2.58	2.84	3.05

Source: Macrobond

General Government Structural Balance as a % of Potential GDP

	2015	2016	2017	2018	2019	2020	2021	2022	Forecast 2023	Forecast 2024
US	-2.5	-3.6	-4.1	-5.1	-5.7	-10.8	-9.5	-4.0	-5.3	-6.0
Canada	0.0	0.1	-0.3	0.0	-0.2	-8.6	-4.0	-2.7	-1.2	-0.6
UK	-3.6	-2.8	-2.3	-2.4	-2.7	0.5	-3.2	-4.3	-1.7	-0.4
Eurozone	-0.5	-0.5	-0.5	-0.3	-0.5	-4.3	-3.8	-3.5	-2.9	
Germany	1.2	1.2	1.1	1.6	1.3	-2.9	-3.0	-3.0	-1.8	-1.1
France	-2.1	-1.9	-1.9	-1.5	-2.1	-5.7	-5.1	-4.5	-4.8	-4.3
Italy	-0.6	-1.2	-1.5	-1.6	-0.9	-6.0	-5.1	-5.7	-3.6	-3.6
Japan	-4.2	-4.0	-3.4	-2.5	-2.6	-8.2	-6.3	-7.3	-3.2	-2.3
Australia	-2.6	-2.2	-1.6	-1.1	-4.0	-7.9	-6.2	-3.5	-3.1	-2.6

Source: International Monetary Fund, World Economic Outlook

Headline Consumer and Producer Price Inflation

	CPI Year/Year % Change						PPI Year/Year % Change				
	Aug	Sep	Oct	Nov	Dec		Jul	Aug	Sep	Oct	Nov
US	8.3	8.2	7.7	7.1			9.7	8.7	8.5	8.1	7.4
Canada	7.0	6.9	6.9	6.8			11.7	10.4	9.1	10.1	9.7
UK	9.9	10.1	11.1	10.7			19.8	18.9	18.0	17.1	
Eurozone	9.1	9.9	10.6	10.1			38.1	43.5	41.9	30.5	27.1
Germany	7.9	10.0	10.4	10.0	8.6		37.2	45.8	45.8	34.5	28.2
France	5.9	5.6	6.2	6.2	5.9		26.2	27.9	26.1	21.4	18.5
Italy	8.4	8.9	11.8	11.8	11.6		36.9	40.1	41.7	27.7	29.4
Japan	3.0	3.0	3.7	3.8			9.3	9.6	10.3	9.4	9.3
Australia	7.3	7.3					6.4	6.4	6.4		

Source: Macrobond

Economic Indicators

Real GDP Growth (Q/Q Seasonally Adjusted)

	Quarter/Quarter % Change						Year/Year % Change				
	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22		Q3-21	Q4-21	Q1-22	Q2-22	Q3-22
US	0.7	1.7	-0.4	-0.1	0.8		5.0	5.7	3.7	1.8	1.9
Canada	1.4	1.7	0.7	0.8	0.7		4.3	3.9	3.2	4.7	3.9
UK	1.7	1.5	0.6	0.1	-0.3		8.5	8.9	10.7	4.0	1.9
Eurozone	2.3	0.5	0.6	0.8	0.3		3.9	4.8	5.5	4.2	2.3
Germany	0.8	0.0	0.8	0.1	0.4		1.8	1.2	3.5	1.7	1.3
France	3.3	0.6	-0.2	0.5	0.2		3.6	5.1	4.8	4.2	1.0
Italy	2.8	0.8	0.2	1.1	0.5		4.8	6.5	6.4	5.0	2.6
Japan	-0.5	1.2	-0.5	1.1	-0.2		1.7	0.9	0.6	1.4	1.7
Australia	-1.9	3.8	0.4	0.9	0.6		4.1	4.6	2.9	3.2	5.9

Source: Macrobond

Industrial Production Index (M/M Seasonally Adjusted)

	Month/Month % Change						Year/Year % Change				
	Jul	Aug	Sep	Oct	Nov		Jul	Aug	Sep	Oct	Nov
US	0.5	-0.1	0.4	-0.1	-0.2		3.6	3.5	5.0	3.3	2.5
Canada	0.5	-0.5	0.4	-0.9			4.6	3.8	3.9	1.9	
UK	-0.7	-1.4	0.3	0.0			-2.7	-4.4	-3.1	-2.4	
Germany	0.0	-1.2	1.1	-0.1			-0.7	2.1	3.0	0.2	
France	-1.7	2.5	-0.9	-2.6			-1.3	1.3	1.6	-2.7	
Italy	0.4	2.2	-1.7	-1.0			-1.2	2.5	-0.5	-1.3	
Japan	0.8	3.4	-1.7	-3.2	-0.1		-1.2	4.2	9.6	3.8	-1.2

Source: Macrobond

Unemployment Rate (Seasonally Adjusted)

	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
US	3.8	3.6	3.6	3.6	3.6	3.5	3.7	3.5	3.7	3.6	3.5
Canada	5.5	5.3	5.2	5.1	4.9	4.9	5.4	5.2	5.2	5.1	5.0
UK	3.7	3.8	3.8	3.8	3.6	3.5	3.6	3.7			
Eurozone	6.8	6.8	6.7	6.7	6.7	6.6	6.7	6.6	6.5		
Germany	5.1	5.0	5.0	5.0	5.3	5.4	5.5	5.5	5.5	5.5	5.5
France	7.3	7.4	7.5	7.6	7.6	7.3	7.2	7.1	7.1		
Italy	8.5	8.3	8.2	8.1	8.0	7.9	7.9	7.9	7.8		
Japan	2.7	2.6	2.5	2.6	2.6	2.6	2.5	2.6	2.6	2.5	
Australia	4.0	3.9	3.9	3.9	3.6	3.5	3.5	3.6	3.4	3.4	

Source: Macrobond

Current Account Balance as a % of GDP (Seasonally Adjusted)

	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22
US	-2.0	-3.1	-3.2	-3.5	-3.4	-3.6	-3.8	-3.7	-4.6	-3.8	-3.4
Canada	-3.3	-1.5	-2.4	-1.4	0.0	-0.4	-0.6	0.0	0.1	0.4	-1.6
UK	-2.2	-1.1	-2.6	-6.6	-1.9	-0.4	-3.3	-0.4	-7.7	-5.7	-3.1
Eurozone	0.4	1.2	2.1	3.2	3.5	3.1	2.3	1.2	0.4	-1.4	-1.9
Germany	6.9	5.3	7.0	8.1	9.1	8.1	6.7	5.9	5.6	3.5	1.8
France	-1.3	-3.7	-2.0	-0.4	0.6	0.7	0.3	-0.3	-0.2	-1.8	-3.5
Japan	4.3	3.7	4.6	4.2	3.6	4.0	3.4	3.1	3.4	3.5	3.5
Australia	-1.5	-2.5	-2.8	-3.5	-2.2	-2.7	-2.2	-1.4	-0.2	1.2	

Source: Macrobond

About State Street Global Advisors

For four decades, State Street Global Advisors has served the world's governments, institutions and financial advisors. With a rigorous, risk-aware approach built on research, analysis and market-tested experience, we build from a breadth of index and active strategies to create cost- effective solutions. And, as pioneers in index, ETF, and ESG investing, we are always inventing new ways to invest. As a result, we have become the world's fourth-largest asset manager* with US $3.26 trillion† under our care.

* Pensions & Investments Research Center, as of December 31, 2021.

† This figure is presented as of September 30, 2022 and includes approximately $55.12 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 January 06, 2023 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.

2537623.170.1.GBL.RTL
Exp. Date: 01/06/2024