May 19, 2023 Commentary

Weekly Economic Perspectives

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Spotlight on Next Week

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Moderate gains in US personal income and spending. Canada's March retail sales seen down sharply. UK's CPI inflation poised for meaningful step lower.

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The Economy

Japan was a bright spot in yet another week of mixed global data.

US

Retail sales rose 0.4% in April, a little softer than expected, but when juxtaposed with upward revisions to the March data, they were largely in line. Moreover, control sales (excluding food services, building materials, autos dealers and gas stations) rebounded 0.7%. The overall trend remains one of slowing growth, however. Seasonally adjusted total sales are now just 1.6% and control sales just 4.2% higher than a year ago. In non-seasonally adjusted terms—usually the better indicator for over-the-year performance, and especially so at a time of questionable seasonal adjustments as currently—the two respective series increased 0.2% y/y and 3.0% y/y. Given easing inflation (retail sales are reported in nominal terms) and slowing demand generally, it is just a matter of time before these comparisons cross into negative territory. To be sure, many retail sales components are already there, most notably sales at gasoline stations, which are now 15.2% lower than in April 2022. In fact, if there was something odd in this report, it was the 0.8% m/m decline in sales at gasoline stations; given the jump in gasoline prices in April, one would have expected to see a robust print there. We are not sure whether we should read this as implying a sizable volume contraction or simply as yet another example in a growing string of data "oddities". By contrast, motor vehicles and parts rose a tepid 0.4% despite a massive 7.4% jump in reported unit sales during the month. Is this signaling more price incentives? Perhaps. Interestingly, sales at bars and restaurants are the category showing the biggest y/y increase at the moment (+8.8%); it seems unlikely that they can maintain this rate of expansion for long; both disinflation and demand moderation are bound to arrive in this space also over the next few months.

Figure 1: Disinflation And Slowing Demand Weigh On US Retail Sales % chg y/y 20.0 17.5 15.0 12.5 10.0 7.5 5.0 2.5 0.0 May Sep Feb Jun Oct Mar Apr Aug Nov Dec Jan Feb Mar 22 23 — Retail Control Group, Trend Adjusted — Retail & Food Services Sales, Total

Sources: Macrobond, SSGA Economics, U.S. Census Bureau Updated as of 5/19/2023

There was an opposite dynamic in **industrial production**: the April data surprised positively with a 0.5% monthly gain, but that was largely offset by a four tenth

downward revision to March. Manufacturing rebounded 1.0%, more than retracing the March contraction, aided by a 9.3% jump in motor vehicle and parts output. Mining output ticked up 0.6% but utilities relapsed 3.1%. Overall industrial production is still up 0.2% y/y, but this is entirely on account of recovering mining output; manufacturing production is down 0.9% y/y and utilities are down 0.5% y/y.

Leading indicators of manufacturing activity remain both weak and mixed. The **Empire manufacturing index** collapsed 42.6 points in May, the largest decline since August. However, as we wrote last month, "we have come to view the Empire one as the least reliable signal due to massive up and down moves from month to month. The volatility has been so acute lately that merely anticipating on a reversal of the prior month's move seems as good a forecasting method for this index as any other." And indeed, the May decline only moderately exceeded the April surge, so the index still only registered a four-month low. Unsurprisingly given the magnitude of the headline move, most categories recorded large declines, especially new orders and shipments. However, employment indicators actually improved modestly and the price metrics were little changed.

By contrast, the Philly Fed **manufacturing index** bested expectations with a 20.9-point rebound that left it at a four-month high. Most categories improved with new orders up sharply; perhaps just to maintain maximum contrast with the Empire Fed index, however, employment declined and future expectations deteriorated. The prices paid measure ticked up slightly but the priced received metric dipped to the lowest level since April 2020.

Homebuilder sentiment continues to improve. While that improvement had been visible for some months, it had previously been modest; in April, it was quite substantial. The headline NAHB (National Association of Homebuilders) index jumped 5.0 points to 50.0, the highest level since July. The biggest improvement was in future sales expectations (+7) but present sales also jumped (+5) while buyer traffic improved a modest 2.0 points.

There remains insufficient housing inventory, which is why demand is reviving as soon as there is any relief in affordability. The inventory situation is particularly tenuous in the existing home market, where high mortgage rates disincentivize current owners from moving just as they are disincentivizing buyers from buying. **Existing home sales** declined 3.4% in April and are 23.2% lower than in April 2022. Inventory stands at 2.9 months of sales, roughly midways between the lows of early 2022 and the levels prevailing immediately before Covid. The median price of a single family home declined 2.1% y/y. Price concessions and the start of the peak selling season helped homes sell a little faster than in recent months. On average, properties stayed on the market 22 days, down from 29 in March and 34 in February.

In the new home market, inventory levels have picked up noticeably so builders are taking a more cautious approach to residential construction. Admittedly, **housing starts** increased 2.2% m/m in April, but a downward revision to the March data left them essentially in line with expectations and 22.3% lower than in April 2022. **Building permits** remain 21.1% lower than a year earlier, with similar performance across the single- and multi-family segments.

Canada

Headline CPI (not seasonally adjusted) jumped 4.4% y/y in April, against the consensus of 4.1%, marking a considerable surprise. More importantly, seasonally adjusted prices rose 0.6% m/m, twice the March rate. While most of the contribution came from rising rents and higher mortgage interest costs, we are concerned about the higher contribution from private transportation and recreation. In fact, shelter contributed "just" 1.43 pp to annual CPI – the least since December 2021!

Out of the eight components in the CPI basket, only two contributed more to the annual rate in April: transportation (+0.2 pp from March) and recreation (+0.1 pp). The rise in transportation was entirely in the private category as gasoline prices jumped 6.3% m/m (but -7.7% y/y), and the 'operation of private passenger vehicles rose 2.9% m/m. Furthermore, on an annual basis, vehicle parts and maintenance costs are rising, so there are some upside risks from transportation in the months ahead.

But rising rents and mortgage interest costs were centerstage; together, they contributed 4.6 pp to the overall shelter CPI of 4.9% y/y. Canadians paid more 28.5% more interest on their mortgages in April 2023 compared to April 2022, as loans were renewed or initiated at higher rates. A Rentals.ca report showed that rents averaged C\$2,002 in April across Canada, up 20% from the pandemic low two years ago.

Rising migration is lifting housing demand and builders appear to be responding. **Housing starts** jumped 22% in April, well above consensus. The gain was entirely driven by the volatile multi-family sector, where starts surged 33% m/m. Region-wise, starts rose nearly 50% in Ontario (the region most preferred by migrants), the highest since September 2022. This jump in starts may have resulted in a higher construction activity supporting economic growth.

A third of Canadian mortgages have a variable rate, and among these, three-quarters have a 'fixed payment' (higher interest and smaller principal payment as rates rise to add up to the same fixed payment). The Bank of Canada (BoC) estimated that nearly 15% of fixed payment mortgages may have reached the so-called "trigger rate" at which their interest component would be higher than the scheduled fixed payment. This may result in a nearly 40% increase in payments to maintain the original amortization schedule. By the end of 2023, nearly 50% of all mortgages may make higher payments, according to the Bank's **Financial System Review** released this week. The report also echoed our concerns on mortgage arrears as the Bank is "more concerned than it was in 2022 about the ability of households to service debt."

In a press conference after the report, senior deputy governor Carolyn Rogers said, "In a severe and prolonged recession, mortgage defaults could rise, leading to credit losses for lenders." Earlier in the week, the BoC's **Senior Loan Officer Survey** showed that mortgage lending conditions tightened significantly in Q1; the index rose sharply to 35.62 from -3.87 in Q4, signaling **the tightest mortgage lending conditions** since the survey started in 2017.

For these reasons, despite the upside surprise in April inflation, we do not expect the BoC to hike in June. The inclusion of mortgage interest costs in the CPI basket may be causing some headaches for the BoC at the moment but domestic consumption is already slowing (March **retail sales** were down 1.4% m/m) and inflation is off its peak. Shelter CPI could resolve itself on improving supply, although this would take time. Additional tightening could actually result in higher inflation contributions from mortgage interest costs and rents.

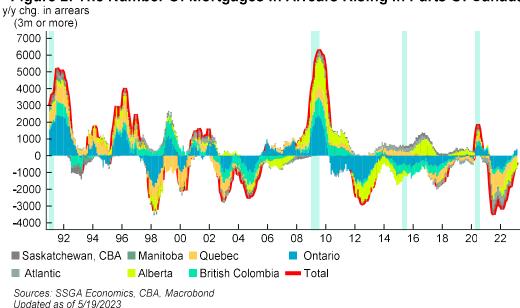


Figure 2: The Number Of Mortgages In Arrears Rising In Parts Of Canada

Updated as of 5/19/2023

Finally, the new housing price index showed that home prices fell 0.1% m/m in April and are now down six times since they peaked last August. The BoC review also noted that declining home prices can "increase loan defaults." Indeed, the number of mortgages in arrears has started to increase in parts of Canada (Figure 2 above) though not yet in aggregate.

Our UK labor market commentary has long highlighted the steady decline in vacancies over the past year, while also noting that it seemed to have little impact on actual employment so far. That may be starting to change (Figure 3, although it is still too soon to be certain.

Nonetheless, the 136,00 decline in the number of payroll employees in April was notable and this first evidence of a turn bears close watching (Figure 3, page 6). Also notable was the big increase in jobless claims, which surged by 46,700 in April—the most since July 2020. This pushed the claimant count unemployment rate up a tenth to 4.0%; the alternative **ILO unemployment rate** also rose a tenth to 3.9%. We might need to see more deterioration before wage inflation recedes, however. Average weekly earnings (including bonuses) are still up 5.8% y/y while weekly earnings excluding bonuses are up an even higher 6.7% y/y. While both trail inflation so imply a loss of purchasing power, the persistence of wage inflation will complicate the task of bringing inflation back to the 2.0% target.

Unsurprisingly, UK consumers are not particularly happy. Still, they are not quite as gloomy as they were several months ago, likely because they do anticipate some relief on the inflation front soon (we anticipate the same). The GFK consumer confidence index improved 3 points to -27 in May, the best reading since February 2022. It had fallen as low as -49 back in September, so this is material progress.

UK

Number, million No. of Persons, million 1.4 30.00 1.3 29.75 1.2 29.50 1 1 29.25 1.0 29.00 0.9 0.8 28.75 0.7 28.50 0.6 28.25 0.5 28.00 0.40.3 27.75 20 21 23 18 19 22 Job Vacancy Statistics, Unfilled Vacancies, Total, Ihs — Employment, Payroll Employees, rhs

Figure 3: Lower Vacancies A Warning Sign For Future UK Employment

Sources: SSGA Economics, ONS, Macrobond Updated as of 5/19/2023

Eurozone

A massive 4.1% plunge in *eurozone* industrial production in March left the level of output 1.4% lower than a year earlier—the first y/y decline since December and, prior to that, July. Losses were centered in capital goods output, which collapsed 15.4% m/m. The decline aligns with broadening signs of a capex retrenchment globally amid slowing growth and high cost of capital, but its magnitude was nonetheless surprising. Output of consumer goods showed more resilience, with non-durable consumer goods production down 0.8% m/m but durable consumer goods output 2.8% higher.

Eurozone inflation was confirmed at 7.0% y/y in April, a tick higher than in March. By contrast, core inflation eased a tenth to 5.6% y/y. Both are headed materially lower over the next few months, but for the time being they are elevated enough to justify some additional incremental tightening by the ECB. At the same time, leading indicators of inflation are rapidly moderating. **German PPI inflation** eased to 4.1% y/y, coming in slightly softer than expected. It seems bound for negative prints soon.

The **ZEW survey** confirmed that the German economy could struggle for momentum in the near term. The headline expectations index lost 14.8 points to -10.7 in May, the lowest level since December. The assessment of current conditions remains weak, though much better than it was several months ago.

Japan

Our confidence in the Japanese economy anchoring global growth positively this year scaled new highs this week, just like the TOPIX Index which rose to its highest level since August 1990.

Real **GDP** grew at a 1.6% q/q seasonally adjusted annualized rate (saar) in the first quarter, well above consensus and even our bullish estimate of 1.4%. Private consumption rose 2.4% saar, as expected. Growth in durable goods consumption accelerated to 5.9% q/q (not annualized), and services consumption continued to

recover by 0.8% q/q (also not annualized). We were pleasantly surprised by capital expenditures, which bounced 4.6% saar after contracting in Q4, led mainly by public investments, which rose a solid 10.1% saar to record a fourth consecutive quarterly gain (albeit the Q4 one was minuscule). Higher public investments make way for possibly increased supplementary budget spending, which may not be a bad idea in a globally slowing macroeconomic environment.

However, headwinds from a slowing global economy pose risks ahead. Real exports declined for the first time in six quarter, and it was not a minor retreat but a 15.6% saar plunge; outside of Covid, this was the largest decline since 2011! The hit to growth was minimized by a 9.0% saar decline in imports. Trade performance remains a bit of a wild factor. Nonetheless, robust consumption could keep GDP growth anchored for the rest of the year. We need some assurance from wage growth, but we will get there over the next two quarters as price pressures could remain momentous.

Indeed, nationwide inflation data this week showed reaccelerating price pressures. The Bank of Japan's (BoJ) preferred measure of **CPI** – excluding fresh food and energy (BoJ core) jumped 0.5% m/m or 4.1% y/y in April – the first time above 4.0%. Another key CPI metric, the global core (ex all food & energy) climbed 2.5% y/y. Compositionally, food prices rose a sharp 1.0% m/m (or 9.0% y/y). Goods and services prices climbed 0.6% m/m (5.1% y/y) and 0.2% m/m (1.7% y/y), respectively. More importantly, the **corporate goods price index** ticked up 0.2% m/m against expectations of a fall in April.

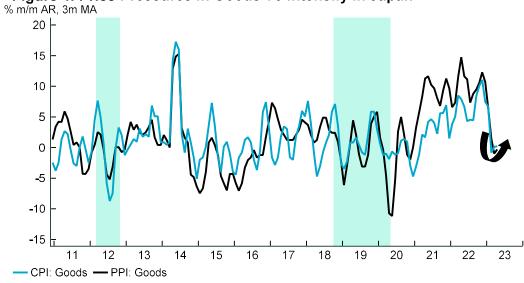


Figure 4: Price-Pressures In Goods To Intensify In Japan

Sources: SSGA Economics, BOJ, SBJ, Macrobond Updated as of 5/19/2023

However, energy prices moderated further on subsidies to 0.1% m/m and fell 4.4% from last year, but the moderation could stall from June as the government approved hikes in electricity prices. Also, firms have yet to pass higher costs to consumers fully. Given these factors, inflation data over the next few months may challenge BoJ's persistently dovish view on inflation.

In a Friday speech on Friday, Governor Kazuo Ueda reiterated that inflation is more likely to slow back below 2% and "that the cost of waiting to ensure inflation is <u>sustainably</u> at 2% is smaller than shifting policy prematurely". We sympathize with this dovish view as the Bank cannot afford to offer forward guidance on amending Yield Curve Control (YCC), which may result in JGBs selling off sharply. Nonetheless, we still maintain our view that adjustments to YCC may happen in June or July.

Next week, we look for mean-reversion in March machinery orders and some resilience in the manufacturing PMI. If data matches our expectations, it will increase our confidence in the economy's strength against all (global) odds. Finally, Tokyo CPI may accelerate towards 4.0% y/y in May.

Australia

Consumer sentiment is back near its historic lows after falling 7.9% m/m in May. Declines were broad-based, with depressed spending intentions aligning with our expectations of easing consumption. The only notable exception was the upbeat housing sentiment as price expectations increased for a second month to 76.3.

The Reserve Bank of Australia's (RBA) surprise hike this month was probably an important catalyst that undermined sentiment. The **meeting minutes** showed that the outcome was "finely balanced" and reiterated that further rate hikes may be required. We still think further hikes may be hard to come as they "would depend on how the economy and inflation evolve." The uptick in the unemployment rate and the lack of sequential acceleration in wage growth in April support our view.

Employment declined by 4.3K in April, bucking expectations of a 25.0K gain; the unemployment rate increased two tenths to 3.7%. The details were actually worse because full time employment declined by a little over 27.0K. Further employment gains may be hard to materialize as the employment leading indicator remains depressed, even though it ticked up in March. These depressed levels lead "cyclical employment" by a year with a 54% correlation. Cyclical employment is the one-year-centered trend deviation from the six-year-centered trend. The implications are profound currently, as the leading indicator had fallen for thirteen successive months through May. The tick-up in May was attributed to the rises in China's PMI data and "s only tentative" on the extremely low level of consumer sentiment.

The wage price index (WPI) rose 0.8% q/q, a tenth below consensus. However, revisions left the y/y growth rate of 3.7% one tenth above consensus. Wages rose for only 14% of private-sector jobs, less than the pre-pandemic times, but they received a wage growth of 4.3%. Conversely, 38% of the public sector employees received a wage increase with an average of 3.0% growth rate. The lack of an upside surprise in wage growth and the downside surprise in employment support our view that the RBA will not hike the cash rate in June. We also think the central bank is very likely done hiking this cycle.

Week in Review (May 15 - May 19)

| Country | Release (Date, format) | Consensus | Actual | Last | Comments |
|-----------|---|-----------|--------|-------------------|---|
| Monday, | May 15 | | | | |
| US | Empire Manufacturing (May) | -3.9 | -31.8 | 10.8 | Huge month to month swings. |
| CA | Housing Starts (Apr, thous) | 220.0 | 261.6 | 213.8 (↓) | High housing demand from returning migrants. |
| CA | Existing Home Sales (Apr, m/m) | na | 11.3% | 1.4% | Has the cavalry arrived? |
| EC | Industrial Production (Mar, m/m, sa) | -2.8% | -4.1% | 1.5% | Big drop in capital goods output. |
| JN | PPI (Apr, y/y) | 5.6% | 5.8% | 7.4% (↑) | Definitely not benign price pressures. |
| Tuesday, | May 16 | | | | |
| US | Retail Sales Advance (Apr, m/m) | 0.8% | 0.4% | -0.7% (↑) | Some oddities but good for Q2 GDP. |
| US | Industrial Production (Apr, m/m) | 0.0% | 0.5% | 0.0% (↓) | 1.0% m/m rebound in manufacturing. |
| US | Business Inventories (Mar, m/m) | 0.0% | -0.1% | 0.0% (↓) | Still too high. |
| US | NAHB Housing Market Index (May) | 45 | 50 | 45 | Start of peak selling season. |
| CA | Manufacturing Sales (Mar, m/m) | 0.7% | 0.7% | -3.6% | Modest gain. |
| CA | CPI (Apr, y/y) | 4.1% | 4.4% | 4.3% | Still, the BoC may not hike rates. |
| UK | Average Weekly Earnings (Mar, y/y, 3m) | 5.8% | 5.8% | 5.8% (↓) | Too high. |
| UK | ILO Unemployment Rate (Mar, 3m) | 3.8% | 3.9% | 3.8% | Ticking higher. |
| EC | GDP (Q1, q/q, sa, prelim) | 0.1% (p) | 0.1% | -0.1% | Weak. |
| GE | ZEW Survey Expectations (May) | -5.0 | -10.7 | 4.1 | Relapsing. |
| JN | GDP (Q1, q/q, sa, prelim) | 0.2% | 0.4% | 0.0% | We love the upside surprise. |
| AU | Wage Price Index (Q1, y/y) | 3.6% | 3.7% | 3.4% (↑) | Seasonal adjustments; q/q below consensus. |
| Wednesd | ay, May 17 | | | | |
| US | Building Permits (Apr, thous) | 1,430 | 1,416 | 1,437 (†) | Down 21.1% y/y. |
| US | Housing Starts (Apr, thous) | 1,400 | 1,401 | 1,371 (↓) | Down 22.3% y/y. |
| EC | CPI (Apr, y/y, final) | 7.0% (p) | 7.0% | 6.9% | Core inflation eased a tenth to 5.6%. |
| FR | ILO Mainland Unemployment Rate (Q1) | 6.9% | 6.9% | 6.9% (↓) | Very low historically. |
| JN | Industrial Production (Mar, m/m, final) | 0.8% (p) | 1.1% | 4.6% | Good as long as growing. |
| AU | Employment Change (Apr, thous) | 25.0 | -4.4 | 61.1 (†) | Forward looking indicators not too bright. |
| AU | Unemployment Rate (Apr) | 3.5% | 3.7% | 3.5% | Forward looking indicators not too bright. |
| Thursday | ₇ , May 18 | | | | |
| US | Initial Jobless Claims (May 13, thous) | 251 | 242 | 264 | In gentle uptrend. |
| US | Continuing Claims (May 06, thous) | 1,820 | 1,799 | 1,807 (↓) | In gentle uptrend. |
| US | Philadelphia Fed Business Outlook (May) | -20.0 | -10.4 | -31.3 | Prices received metric lowest since April 2020. |
| US | Existing Home Sales (Apr, m/m) | -3.2% | -3.4% | - 2.6% (↓) | Lack of inventory is a challenge. |
| US | Leading Index (Apr, m/m) | -0.6% | -0.6% | -1.2% | Down 8.0% y/y. |
| UK | GfK Consumer Confidence (May) | -27.0 | -27.0 | -30.0 | Bad, but at least not getting worse |
| JN | CPI (Apr, y/y) | 3.5% | 3.5% | 3.2% | Expect more. |
| Friday, M | ay 19 | | | 1 | |
| CA | Retail Sales (Mar, m/m) | na | -1.4% | -0.2% | Still declining. |
| GE | PPI (Apr, y/y) | 4.3% | 4.1% | 7.5% | Likely to turn negative y/y soon. |
| JN | Tertiary Industry Index (Mar, m/m) | 0.3% | -1.7% | 0.7% | Not great for exports outlook. |

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

Week In Preview (May 22 - May 26)

| Country | Release (Date, format) | Consensus | Last | Comments |
|------------|---|-----------|-------|---|
| Monday, N | May 22 | | | |
| JN | Core Machine Orders (Mar, m/m) | 0.4% | -4.5% | Looking for a bigger rise. |
| JN | Manufacturing PMI (May, prelim) | na | 49.5 | Strong domestic capex plans may cause a tick up. |
| Tuesday, | May 23 | | • | |
| US | New Home Sales (Apr, thous) | 663.0 | 683.0 | |
| CA | Industrial Product Price (Apr, m/m) | 0.2% | 0.1% | Could be a downside surprise on stalling consumption. |
| CA | Raw Materials Price Index (Apr, m/m) | 0.6% | -1.7% | May moderate. |
| UK | Manufacturing PMI (May, prelim) | 47.9 | 47.8 | |
| UK | Services PMI (May, prelim) | 55.7 | 55.9 | |
| EC | Manufacturing PMI (May, prelim) | 45.8 | 45.8 | |
| EC | Composite PMI (May, prelim) | 53.5 | 54.1 | |
| EC | Services PMI (May, prelim) | 55.5 | 56.2 | |
| GE | Manufacturing PMI (May, prelim) | 45.0 | 44.5 | |
| GE | Services PMI (May, prelim) | 55.3 | 56.0 | |
| FR | Manufacturing PMI (May, prelim) | 46.0 | 45.6 | |
| Wednesda | | | 10.0 | |
| UK | CPI (Apr, y/y) | 8.2% | 10.1% | First meaningful step down. |
| GE | IFO Business Climate (May) | 93.0 | 93.6 | |
| Thursday, | | | | |
| US | Initial Jobless Claims (May 20, thous) | 248 | 242 | |
| US | Continuing Claims (May 13, thous) | 1,800 | 1,799 | |
| US | GDP (Q1, q/q saar, second estimate) | 1.1% (p) | 2.6% | |
| US | Pending Home Sales (Apr, m/m) | 1.0% | -5.2% | |
| GE | GDP (Q1, q/q, final, sa) | 0.0% (p) | -0.4% | |
| GE | GfK Consumer Confidence (Jun) | -23.5 | -25.7 | |
| FR | Business Confidence (May) | 101.0 | 102.0 | |
| JN | PPI Services (Apr, y/y) | 1.4% | 1.6% | Good as long as rising. |
| AU | Retail Sales (Apr, m/m) | 0.3% | 0.4% | Cooling. |
| Friday, Ma | ay 26 | | | |
| US | Personal Income (Apr, m/m) | 0.4% | 0.3% | |
| US | Personal Spending (Apr, m/m) | 0.4% | 0.0% | |
| US | Durable Goods Orders (Apr, m/m, prelim) | -1.0% | 3.2% | |
| US | U. of Mich. Sentiment (May, final) | 57.7 (p) | 63.5 | |
| UK | Retail Sales Inc Auto Fuel (Apr, m/m) | 0.2% | -0.9% | |
| FR | Consumer Confidence (May) | 84.0 | 83.0 | |
| IT | Consumer Confidence Index (May) | na | 105.5 | |
| IT | Manufacturing Confidence (May) | 102.0 | 103.0 | |

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

Economic Indicators

| Central Bank Policy Targets | | | | | | | | | | |
|-----------------------------|---|------|------------------------------|------|------|-----|--|--|--|--|
| Region | Target | | Year/Year % Change in Target | | | | | | | |
| | | Dec | Jan | Feb | Mar | Apr | | | | |
| US | Target: PCE price index 2.0% y/y | 5.3 | 5.4 | 5.1 | 4.2 | | | | | |
| Canada | Target: CPI 2.0% y/y, 1.0%-3.0% control range | 6.3 | 5.9 | 5.2 | 4.3 | 4.4 | | | | |
| UK | Target: CPI 2.0% y/y | 10.5 | 10.1 | 10.4 | 10.1 | | | | | |
| Eurozone | Target: CPI below but close to 2.0% y/y | 9.2 | 8.6 | 8.5 | 6.9 | 7.0 | | | | |
| Japan | Target: CPI 2.0% y/y | 4.0 | 4.3 | 3.3 | 3.2 | 3.5 | | | | |
| Australia | Target Range: CPI 2.0%-3.0% y/y | 7.8 | 7.0 | 7.0 | 7.0 | | | | | |

Source: Macrobond

| Key Interest Rates | | | | | | | | | | | |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Jan-23 | Feb-23 | Mar-23 | Apr-23 |
| US (top of target range) | 1.75 | 2.50 | 2.50 | 3.25 | 3.25 | 4.00 | 4.50 | 4.50 | 4.75 | 5.00 | 5.00 |
| Canada (Overnight Rate) | 1.50 | 2.50 | 2.50 | 3.25 | 3.75 | 3.75 | 4.25 | 4.50 | 4.50 | 4.50 | 4.50 |
| UK (Bank Rate) | 1.25 | 1.25 | 1.75 | 2.25 | 2.25 | 3.00 | 3.50 | 3.50 | 4.00 | 4.25 | 4.25 |
| Eurozone (Refi) | 0.00 | 0.50 | 0.50 | 1.25 | 1.25 | 2.00 | 2.50 | 2.50 | 3.00 | 3.50 | 3.50 |
| Japan (OCR) | -0.04 | -0.01 | -0.04 | -0.07 | -0.06 | -0.08 | -0.02 | -0.01 | -0.01 | -0.03 | -0.07 |
| Australia (OCR) | 0.73 | 1.28 | 1.81 | 2.25 | 2.58 | 2.84 | 3.05 | 3.10 | 3.29 | 3.54 | 3.60 |

Source: Macrobond

| General Government Structural Balance as a % of Potential GDP | | | | | | | | | | |
|---|------|------|------|------|------|-------|-------|------|------|------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| US | -2.5 | -3.6 | -4.3 | -5.1 | -6.0 | -10.7 | -10.7 | -5.9 | -6.6 | -6.7 |
| Canada | 0.0 | 0.0 | -0.3 | 0.0 | -0.2 | -8.1 | -3.3 | -1.2 | -0.5 | -0.1 |
| UK | -2.5 | -1.6 | -1.3 | -1.4 | -1.6 | 0.8 | -3.6 | -4.5 | -4.3 | -2.8 |
| Eurozone | -0.5 | -0.5 | -0.4 | -0.3 | -0.5 | -4.0 | -3.8 | -2.8 | -3.1 | -2.5 |
| Germany | 1.2 | 1.2 | 1.1 | 1.6 | 1.3 | -2.9 | -3.0 | -2.6 | -3.2 | -1.4 |
| France | -2.1 | -1.9 | -1.9 | -1.5 | -2.1 | -5.8 | -5.2 | -4.4 | -4.6 | -4.1 |
| Italy | -0.4 | -1.0 | -1.5 | -1.6 | -0.9 | -6.1 | -6.7 | -2.4 | -2.0 | -3.0 |
| Japan | -4.5 | -4.5 | -3.7 | -3.0 | -3.3 | -8.1 | -6.2 | -7.8 | -6.4 | -4.1 |
| Australia | -2.5 | -2.2 | -1.5 | -1.1 | -4.0 | -7.9 | -6.1 | -3.5 | -3.3 | -2.9 |

Source: International Monetary Fund, World Economic Outlook

Headline Consumer and Producer Price Inflation

| | CPI Year/Year % Change | | | | | PPI Year/Year % Change | | | | |
|-----------|------------------------|------|------|------|-----|------------------------|------|------|------|-----|
| | Dec | Jan | Feb | Mar | Apr | Dec | Jan | Feb | Mar | Apr |
| US | 6.5 | 6.4 | 6.0 | 5.0 | 4.9 | 6.4 | 5.7 | 4.8 | 2.7 | 2.3 |
| Canada | 6.3 | 5.9 | 5.2 | 4.3 | 4.4 | 7.4 | 5.0 | 1.6 | -1.8 | |
| UK | 10.5 | 10.1 | 10.4 | 10.1 | | 14.5 | 13.4 | 12.0 | 8.7 | |
| Eurozone | 9.2 | 8.6 | 8.5 | 6.9 | 7.0 | 24.6 | 15.1 | 13.4 | 5.9 | |
| Germany | 8.1 | 8.7 | 8.7 | 7.4 | 7.2 | 21.6 | 16.6 | 13.5 | 6.7 | 4.1 |
| France | 5.9 | 6.0 | 6.3 | 5.7 | 5.9 | 17.5 | 14.9 | 13.3 | 9.5 | |
| Italy | 11.6 | 10.0 | 9.1 | 7.6 | 8.2 | 31.7 | 11.1 | 9.6 | 3.8 | |
| Japan | 4.0 | 4.3 | 3.3 | 3.2 | 3.5 | 10.6 | 9.6 | 8.3 | 7.4 | 5.8 |
| Australia | 7.8 | 7.0 | 7.0 | 7.0 | | 5.8 | 5.2 | 5.2 | 5.2 | |

Source: Macrobond

Economic Indicators

| Real GDP Gro | wth (Q/Q Seas | onally Adjusted) |
|--------------|---------------|------------------|
|--------------|---------------|------------------|

| | | Quarter/Quarter % Change | | | | | | Year/Year % Change | | | |
|-----------|-------|--------------------------|-------|-------|-------|--|-------|--------------------|-------|-------|-------|
| | Q1-22 | Q2-22 | Q3-22 | Q4-22 | Q1-23 | | Q1-22 | Q2-22 | Q3-22 | Q4-22 | Q1-23 |
| US | -0.4 | -0.1 | 8.0 | 0.6 | 0.3 | | 3.7 | 1.8 | 1.9 | 0.9 | 1.6 |
| Canada | 0.6 | 0.9 | 0.6 | 0.0 | | | 3.1 | 4.7 | 3.8 | 2.1 | |
| UK | 0.5 | 0.1 | -0.1 | 0.1 | 0.1 | | 10.6 | 3.8 | 2.0 | 0.6 | 0.2 |
| Eurozone | 0.6 | 0.9 | 0.4 | -0.1 | 0.1 | | 5.5 | 4.4 | 2.5 | 1.8 | 1.3 |
| Germany | 1.0 | -0.1 | 0.5 | -0.5 | 0.0 | | 3.8 | 1.7 | 1.4 | 0.8 | -0.1 |
| France | -0.2 | 0.5 | 0.1 | 0.0 | 0.2 | | 4.7 | 4.2 | 1.0 | 0.4 | 0.8 |
| Italy | 0.1 | 1.1 | 0.4 | -0.1 | 0.5 | | 6.5 | 5.1 | 2.5 | 1.4 | 1.8 |
| Japan | -0.5 | 1.1 | -0.2 | 0.0 | 0.4 | | 0.7 | 1.5 | 1.6 | 0.4 | 1.3 |
| Australia | 0.6 | 0.9 | 0.7 | 0.5 | | | 3.0 | 3.1 | 5.9 | 2.7 | |

Source: Macrobond

Industrial Production Index (M/M Seasonally Adjusted)

| | | Month | /Month % C | hange | | | Year/Year % Change | | | | |
|---------|------|-------|------------|-------|-----|--|--------------------|------|------|------|-----|
| | Dec | Jan | Feb | Mar | Apr | | Dec | Jan | Feb | Mar | Apr |
| US | -1.5 | 1.0 | 0.0 | 0.0 | 0.5 | | 0.6 | 1.5 | 0.8 | 0.1 | 0.2 |
| Canada | -1.2 | 0.7 | 0.2 | | | | 1.3 | 2.0 | 1.7 | | |
| UK | 0.2 | -0.3 | -0.1 | 0.8 | | | -2.7 | -3.0 | -2.8 | -2.0 | |
| Germany | -2.3 | 3.7 | 2.1 | -3.4 | | | -3.7 | -1.0 | 0.8 | 1.6 | |
| France | 1.4 | -2.0 | 1.4 | -1.1 | | | 1.7 | -2.3 | 0.9 | -0.1 | |
| Italy | 1.1 | -0.5 | -0.2 | -0.6 | | | -0.9 | 1.9 | -2.3 | -3.2 | |
| Japan | 0.3 | -5.3 | 4.6 | 1.1 | | | -0.8 | -3.8 | -1.4 | -0.6 | |

Source: Macrobond

| Unemployment Rate | (Seasonally Adjusted) |
|-------------------|-----------------------|
|-------------------|-----------------------|

| | Jun-22 | Jul-22 | Aug-22 | Sep-22 | Oct-22 | Nov-22 | Dec-22 | Jan-23 | Feb-23 | Mar-23 | Apr-23 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| US | 3.6 | 3.5 | 3.7 | 3.5 | 3.7 | 3.6 | 3.5 | 3.4 | 3.6 | 3.5 | 3.4 |
| Canada | 4.9 | 4.9 | 5.3 | 5.2 | 5.2 | 5.1 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| UK | 3.6 | 3.5 | 3.6 | 3.7 | 3.7 | 3.7 | 3.7 | 3.8 | 3.9 | | |
| Eurozone | 6.7 | 6.7 | 6.7 | 6.7 | 6.7 | 6.7 | 6.7 | 6.6 | 6.6 | 6.5 | |
| Germany | 5.3 | 5.4 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.6 | 5.6 |
| France | 7.5 | 7.4 | 7.2 | 7.1 | 7.2 | 7.1 | 7.1 | 7.1 | 7.0 | 6.9 | |
| Italy | 8.0 | 8.0 | 8.1 | 8.0 | 7.9 | 7.9 | 7.9 | 8.0 | 7.9 | 7.8 | |
| Japan | 2.6 | 2.6 | 2.5 | 2.6 | 2.6 | 2.5 | 2.5 | 2.4 | 2.6 | 2.8 | |
| Australia | 3.6 | 3.5 | 3.5 | 3.6 | 3.4 | 3.5 | 3.5 | 3.7 | 3.6 | 3.5 | 3.7 |

Source: Macrobond

| Current Account Balance | as a % of GDP (Seas | sonally Adjusted) |
|-------------------------|---------------------|-------------------|

| | Q3-20 | Q4-20 | Q1-21 | Q2-21 | Q3-21 | Q4-21 | Q1-22 | Q2-22 | Q3-22 | Q4-22 | Q1-23 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| US | -3.2 | -3.5 | -3.4 | -3.6 | -3.8 | -3.7 | -4.5 | -3.8 | -3.4 | -3.2 | |
| Canada | -2.4 | -1.4 | 0.0 | -0.4 | -0.6 | 0.0 | 0.4 | 0.8 | -1.2 | -1.5 | |
| UK | -2.6 | -6.6 | -1.9 | -0.4 | -3.3 | -0.4 | -8.3 | -4.6 | -2.0 | -0.4 | |
| Eurozone | 2.1 | 3.2 | 3.5 | 3.1 | 2.3 | 1.2 | 0.4 | -1.3 | -3.6 | 1.0 | |
| Germany | 7.2 | 8.3 | 9.0 | 8.4 | 7.4 | 6.5 | 5.7 | 4.1 | 2.4 | 4.9 | 6.2 |
| France | -2.0 | -0.3 | 0.5 | 0.7 | 0.4 | -0.1 | -0.2 | -1.8 | -3.6 | -3.0 | -0.4 |
| 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

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

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