

Weekly — April 28, 2023

## Weekly Economic & Financial Commentary

### United States: Labor Costs Complicate the Ride Back to 2% Inflation

- The U.S. economy expanded at a weaker-than-expected pace in Q1; real GDP grew at a 1.1% annualized rate. The ECI increased a hotter-than-expected 1.2% in Q1, suggesting compensation costs are not cooling as much as the average hourly earnings data indicate.
- Next week: Construction Spending (Mon), ISM PMIs (Mon & Wed), Employment (Fri)

### International: Eurozone Avoids Recession, Bank of Japan Keeps Policy Unchanged

- The Eurozone's Q1 GDP data revealed that the economy narrowly avoided recession to start the year, with the economy expanding 0.1% quarter-over-quarter in Q1 after contracting 0.1% in Q4-2022. Elsewhere, the Bank of Japan (BoJ) held its first monetary policy meeting under Governor Ueda and decided unanimously to keep policy settings unchanged. While Ueda's commentary leaned dovish, he did not rule out the possibility of an eventual shift in policy.
- Next week: China PMIs (Sun), Reserve Bank of Australia (Tue), Eurozone CPI & European Central Bank (Tue/Thu)

### Credit Market Insights: Corporate Bond Spreads Hanging In

- Investment grade bond spreads began widening in 2022 as monetary policy tightening ramped up and the probability of a recession began to rise. More recent, spreads again widened in the wake of the two regional bank failures that occurred in March. However, spreads have retraced about half of that widening since mid-March and are again back to roughly the same level they were a year ago.

### Topic of the Week: Up Close on SNAP

- This week, House Republicans passed a bill that would require substantive spending cuts in exchange for raising the federal debt ceiling. Included within the bill was a proposed change to the eligibility guidelines for the Supplemental Nutrition Assistance Program. With decreasing nominal benefits and still rising food prices, the real benefit received by households could continue to decline and have broader implications for the economy.

We have started a new podcast, "Ask Our Economists," where our economists answer questions that readers send in. If you would like to submit a question, please email us at [askoureconomists@wellsfargo.com](mailto:askoureconomists@wellsfargo.com).

#### Wells Fargo U.S. Economic Forecast

	Actual				Forecast				Actual		Forecast	
	2022				2023				2021	2022	2023	2024
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Real Gross Domestic Product <sup>1</sup>	-1.6	-0.6	3.2	2.6	1.1	1.3	-0.9	-2.7	5.9	2.1	1.2	0.2
Personal Consumption	1.3	2.0	2.3	1.0	3.7	0.3	-0.2	-3.3	8.3	2.7	1.5	-0.1
Consumer Price Index <sup>2</sup>	8.0	8.6	8.3	7.1	5.8	4.1	3.2	2.7	4.7	8.0	3.9	2.5
"Core" Consumer Price Index <sup>2</sup>	6.3	6.0	6.3	6.0	5.6	5.2	4.5	4.0	3.6	6.1	4.8	2.9
Quarter-End Interest Rates <sup>3</sup>												
Federal Funds Target Rate <sup>4</sup>	0.50	1.75	3.25	4.50	5.00	5.25	5.25	4.75	0.25	2.02	5.06	2.88
Conventional Mortgage Rate	4.27	5.58	6.01	6.36	6.54	6.25	5.75	5.40	3.03	5.38	5.99	5.03
10 Year Note	2.32	2.98	3.83	3.88	3.48	3.50	3.15	2.90	1.45	2.95	3.26	2.83

Forecast as of: April 13, 2023

<sup>1</sup> Compound Annual Growth Rate Quarter-over-Quarter<sup>2</sup> Year-over-Year Percentage Change<sup>3</sup> Quarterly Data - Period End; Annual Data - Annual Averages<sup>4</sup> Upper Bound of the Federal Funds Target Rate

Source: U.S. Dept. of Commerce, U.S. Dept. of Labor, Federal Reserve Board and Wells Fargo Economics

Please see our full [U.S. Economic Forecast](#).

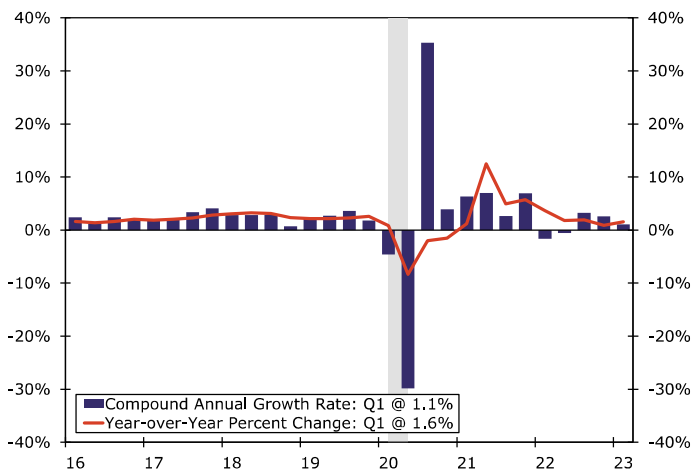
## U.S. Review

### Labor Costs Complicate the Ride Back to 2% Inflation

Economic data released this week show the U.S. economy expanding at a sluggish pace. Real GDP expanded at a 1.1% annualized rate in the first quarter. The outturn was weaker than expected, largely due to a significant drag from private inventories. Consumer spending grew at a solid annualized rate of 3.7%, and government spending increased 4.7%. On the flip side, business spending on equipment fell (-7.3%), and residential investment declined (-4.2%) for the eighth consecutive quarter.

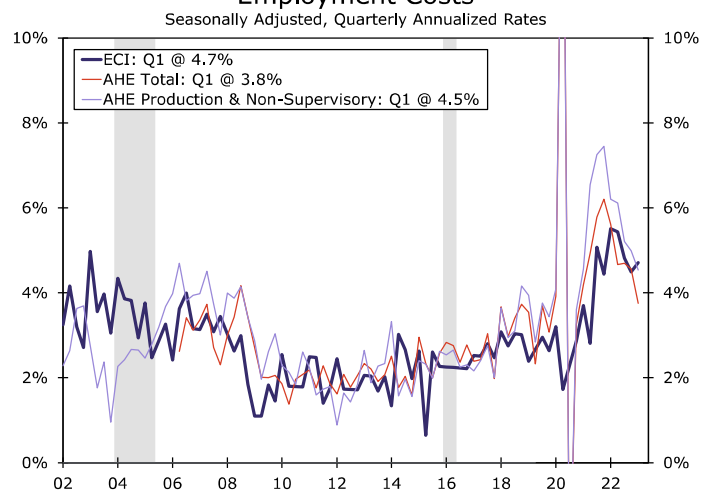
Brighter days may be ahead for housing. New home sales surged 9.6% to a 683K-unit annualized pace in March, marking the third increase in the past four months. Low existing home inventories have supported demand in the new home market, and home builders have boosted sales by offering incentives. As demand for homes is starting to stabilize amid still-tight inventories, home prices have scope to break from their downward trend. The S&P CoreLogic Case-Shiller National HPI eked out a modest 0.2% increase in February after falling for the previous seven straight months.

U.S. Real GDP Growth



Source: U.S. Department of Commerce and Wells Fargo Economics

Employment Costs



Source: U.S. Department of Labor and Wells Fargo Economics

While consumer spending was strong in the Q1 GDP release, much of the strength can be traced to a surge in motor vehicle sales in January. Momentum dissipated toward the end of the quarter. Real personal spending was flat in March, coming off the heels of a 0.2% decline in February. Real disposable income gained for the ninth straight month, supporting consumers' spending capacity as dwindling savings and high borrowing costs have taken a bite. We look for consumer spending to decelerate in the coming months, before contracting later this year, pulling overall economic growth lower.

The pullback in consumer spending should help to ease strong compensation cost growth in the coming quarters. The Employment Cost Index (ECI) increased a hotter-than-expected 1.2% in the first quarter, translating to a 4.7% annualized pace. Wages & salaries and benefits for all workers each rose 1.2% over the quarter, suggesting compensation costs are not cooling as much as the average hourly earnings data indicate. While moderating job openings and hiring plans are being met with stronger labor force participation, there is much further to go before labor costs are consistent with 2% inflation.

The strength in compensation costs suggests the labor market's inflationary pulse will not go away quietly. Some progress has been made on inflation—the annual change in the core PCE deflator dipped to 4.6% in March, which is the lowest in a year and a half—but that remains well above the FOMC's goal. We expect the Committee to hike the target range of the federal funds rate by an additional 25 bps on May 3, lifting the range to 5.00%-5.25%.

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## U.S. Outlook

### Weekly Domestic Indicator Forecasts

Date	Indicator	Period	Consensus	Wells Fargo	Prior
1-May	ISM Manufacturing Index	Apr	46.8	46.5	46.3
1-May	Construction Spending (MoM)	Mar	0.2%	0.2%	-0.1%
3-May	ISM Services Index	Apr	51.9	51.6	51.2
3-May	FOMC Rate Decision (Upper Bound)	3-May	5.25%	5.25%	5.00%
5-May	Nonfarm Payrolls	Apr	180K	195K	236K
5-May	Unemployment Rate	Apr	3.6%	3.6%	3.5%
5-May	Average Hourly Earnings (MoM)	Apr	0.3%	0.3%	0.3%

Forecast as of April 28, 2023

Source: Bloomberg Finance L.P. and Wells Fargo Economics

### Construction Spending • Monday

In February, the construction sector experienced its ninth consecutive monthly decline in residential outlays, in part the cause of the 0.1% month-over-month decline in total construction spending. Single-family home construction continued to wither in the face of high interest rates and still-high building costs, a trend that does not appear to be disappointing any time soon. Mortgage rates remain above 6%. Even as new home sales surprised to the upside in March, bringing it to its fastest annualized pace since March 2022, continued pessimism across the board weighs heavily on the housing market.

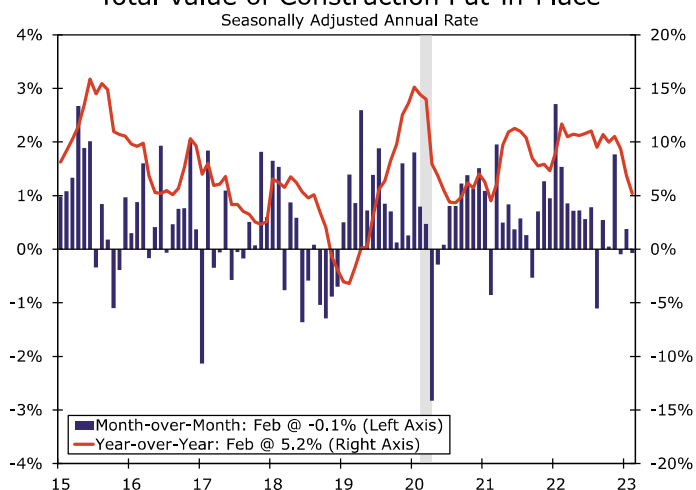
As a leading indicator, the AIA/Delteck Architecture Billings Index (ABI) gives us an early look into construction spending. The March ABI painted a mostly negative picture, with signs of falling contract volume contrasted with a slight improvement in billings. The pace of inquiries into new projects slowed, and the value of new contracts outright declined. Surveyed participants cited high interest rates, inflation and costly development as impediments to continuing growth. However, we do expect some giveback, as we expect construction spending to have risen 0.2% over March.

### ISM PMIs • Monday & Wednesday

The upcoming ISM purchasing manager indices (PMI) give us an early look into business conditions in the second quarter, following a first quarter marked by falling sentiment, rising interest rates and flagging demand. The ISM Services index cooled in March but remained in expansionary territory, as major subcomponents (business activity, new orders and employment) continued to grow. The services sector has kept its head above water by continuing to expand the past three months, excluding a blip in December 2022. However, the lower headline level may be signaling weaknesses across the sector. Higher interest rates and tighter credit conditions are fueling worries about future demand, in line with a large drop in the new orders component in March. When data print next week we look for the ISM services index to rise modestly to 51.6.

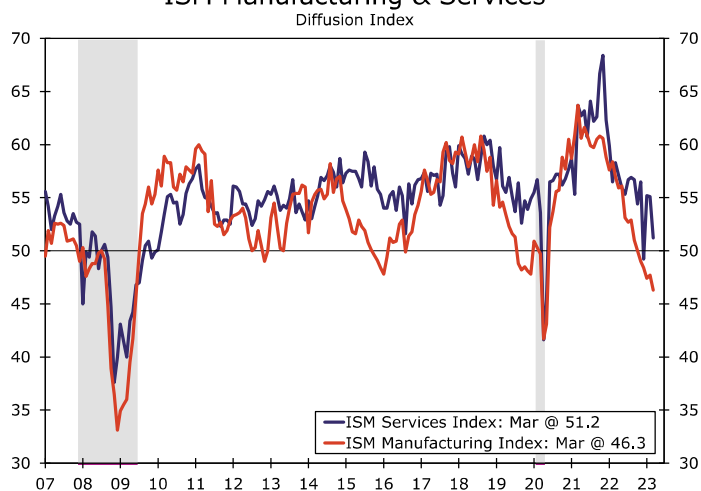
On the other hand, the ISM manufacturing index demonstrates a sector very much in correction, with the index below the 50-breakeven point now for five straight months. The contraction was broad in March, as all subcomponents were below 50 for the first time since 2009. On the bright side, slackening demand is reducing price pressures, as the prices paid measure fell and supplier deliveries sped up. March's financial instability should drive investment lower as credit conditions tighten and rates continue to rise in the fastest monetary policy hiking cycle in a generation.

### Total Value of Construction Put-in-Place



Source: U.S. Department of Commerce and Wells Fargo Economics

### ISM Manufacturing & Services



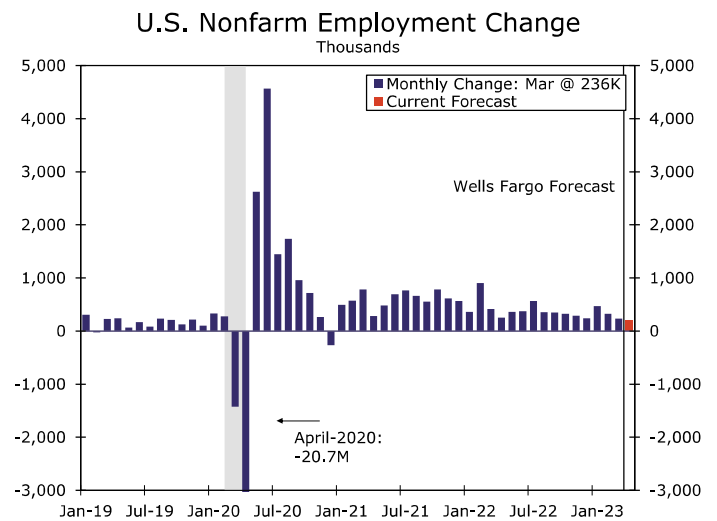
Source: Institute for Supply Management and Wells Fargo Economics

We look for the ISM manufacturing index to rise modestly to 46.5, though that still marks contraction in the sector.

**Employment • Friday**

Slowly bending, not breaking, has so far been the story of the labor market this year. That is unlikely to change with April's employment report. In March, nonfarm payrolls rose by 236K, the weakest print since December 2020. Signs were more encouraging in the separate household survey, where employment rose by 577K, causing the unemployment rate to tick back down to 3.5%. The labor force participation rate also rose for a fourth straight month. But falling hiring plans and job openings point to demand for workers continuing to trend lower. With some hiring pulled forward by the unusually warm weather to start the year, we look for payroll growth to slow to 195K in April and for the unemployment rate to edge back up to 3.6%. Another 0.3% increase in average hourly earnings would keep the year-over-year rate at 4.2%.

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Source: U.S. Department of Labor and Wells Fargo Economics

## International Review

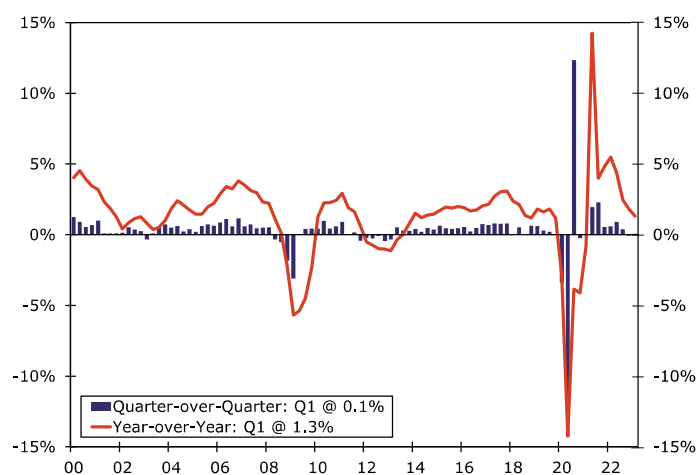
### Eurozone Avoids Recession, Bank of Japan Keeps Policy Unchanged

The Eurozone's Q1 GDP data released this week revealed that the economy narrowly avoided recession at the start of the year. The economy expanded 0.1% quarter-over-quarter in Q1 after contracting 0.1% in Q4-2022, bringing GDP up 1.3% over the year. Overall, we have turned more optimistic on our economic outlook for the Eurozone. A boost in activity has been facilitated by lower energy prices taking the pressure off household finances, while recent economic trends reflect a positive forward-looking direction for the economy as well. April Purchasing Manager Indices (PMIs) suggest the Eurozone economy is currently still expanding, with the services sector leading the way. While manufacturing activity may be more subdued for the time being, the fact that the services PMI has been increasing and in expansionary territory for the past four months is an encouraging sign that it has scope to keep climbing higher in Q2. This same improving sentiment was reflected in the IFO surveys for Germany, the Eurozone's largest economy, which showed Germany's business outlook indicator gaining for the sixth consecutive month in April. Given these positive economic trends, we now forecast the Eurozone economy to grow 0.6% this year, which is contributing to our more upbeat outlook for the global economy.

Elsewhere, the Bank of Japan (BoJ) held its April monetary policy meeting this week, the first one under its new governor, Kazuo Ueda. The BoJ decided unanimously to keep policy settings unchanged —maintaining a policy rate at -0.10% and a JGB target at 0% with a +/- 50 bps tolerance band. Within the details of the announcement, the central bank repeated the statement that “it will not hesitate to take additional easing measures if necessary,” but removed any references to COVID-19 as well as language about policy rates staying the same or going lower. Notably, the central bank will hold a policy review of the monetary easing measures it has taken since 1998, when the economy began experiencing prolonged deflation.

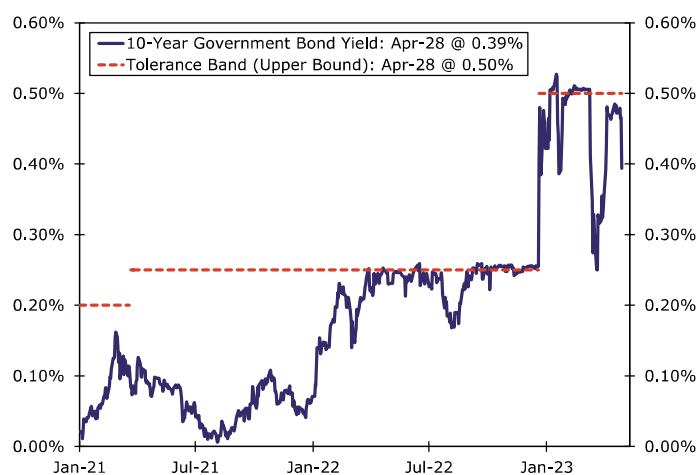
Governor Ueda's commentary leaned dovish in the post-meeting press conference, but did not rule out the possibility of an eventual shift in monetary policy. Ueda said the chance of a normalization in policy during the review is not zero, and the review is not done with any specific policy conclusion already in mind. As for the inflation outlook, while the BoJ's assessment of underlying inflation is improving, Ueda said confidence for the price outlook is low, and he is committed to keeping with YCC until the price trend is at 2%. Given Ueda did not rule out a shift in monetary policy down the line, we continue to believe the BoJ will take advantage of a tactical opportunity to tweak its policy settings in Q4-2023 by lifting the target for the 10-year JGB yield to 0.25% and widening the tolerance band to +/- 75 bps. While economic developments may not necessarily warrant monetary tightening at this time, we view this policy adjustment as primarily geared toward normalizing Japan's government bond market. Should this adjustment proceed smoothly, we would view it as a probable precursor to the BoJ fully ending yield curve control, perhaps sometime in 2024.

Eurozone GDP Growth



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Japanese 10-Year Government Bond Yield



Source: Bloomberg Finance L.P. and Wells Fargo Economics

### Inflation Coming Down, Down Under

Ahead of the Reserve Bank of Australia's (RBA) May monetary policy meeting, Australia's quarterly CPI figures were released this week. In the first quarter of this year, headline CPI rose 7.0% year-over-year, down from 7.8% in Q4-2022. While prices have continued to increase for most goods and services, these price increases moderated over the course of Q1, leading to lower annual inflation. Core inflation has started to recede but still remains elevated. Trimmed mean inflation, a measure of prices that excludes large price movements, receded to 6.6% from 6.9% in Q4-2022. Meanwhile, there are signs that domestically-oriented price pressures remain persistent. Tradables inflation, which is more exposed to international trade influences, slowed rather substantially to 6.1% from 8.7%, while non-tradables, which is more influenced by domestic factors within Australia, ticked up to 7.5%. But in good news, in March specifically, consumer prices rose 6.3% from a year earlier, an encouraging sign that inflation is on the right path and headed lower. We discuss our RBA outlook in more detail [below](#), but overall, inflation has likely already peaked, which is in line with our current forecast that the RBA will hold rates steady again in May.

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### International Outlook

#### Weekly International Indicator Forecasts

Date	Indicator	Period	Consensus	Wells Fargo	Prior
29-Apr	China Manufacturing PMI	Apr	51.4	--	51.9
29-Apr	China Non-Manufacturing PMI	Apr	57.0	--	58.2
2-May	Reserve Bank of Australia Policy Rate	2-May	3.60%	3.60%	3.60%
2-May	Eurozone CPI Estimate YoY	Apr	7.0%	--	6.9%
4-May	European Central Bank Deposit Rate	4-May	3.25%	3.25%	3.00%

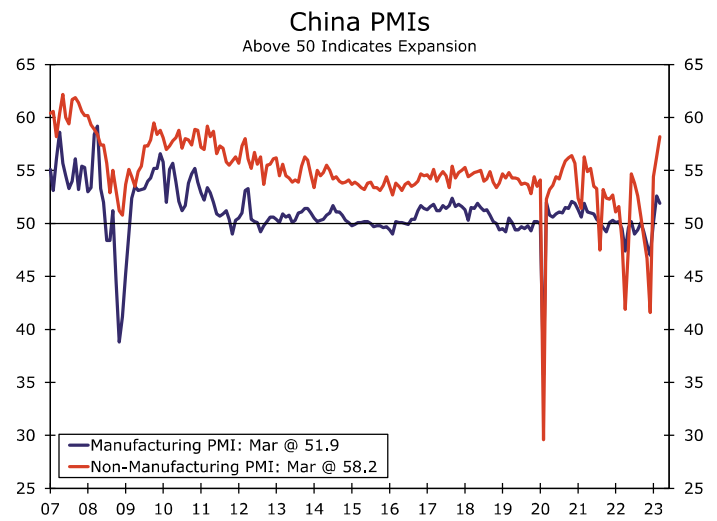
Forecast as of April 28, 2023

Source: Bloomberg Finance L.P. and Wells Fargo Economics

### China PMIs • Sunday

China's rebound from Zero-COVID in the first few months of this year has been remarkable, with economic activity jumping and mobility levels now above pre-pandemic levels. Consumers are ready to spend again, with consumer data showing a greater-than-expected 10.6% year-over-year increase in retail sales in March. Thus, consumers were the primary driver of economic growth in China during the first quarter of 2023. The economy grew 4.5% year-over-year in Q1, with household consumption contributing three percentage points to that expansion. Consumption returning to more normal levels after the lockdowns of the Zero-COVID era is an encouraging sign that China's expansion is on a solid foundation. We believe the economy's momentum can carry forward over the next few quarters.

Exiting Zero-COVID has been followed by a burst of economic activity, specifically in the services sector, although manufacturing has also experienced a strong recovery. These same trends should remain in place this month. The consensus forecast expects both PMIs to remain in expansionary territory but perhaps ease a bit, with the manufacturing PMI at 51.4 and the services PMI at 57.0.



Source: Bloomberg Finance L.P. and Wells Fargo Economics

**Reserve Bank of Australia • Tuesday**

The Reserve Bank of Australia (RBA) held rates steady at 3.60% at its April monetary policy meeting, and we now believe the central bank is on hold. At that April meeting the RBA softened its guidance in regard to further rate hikes, stating that "some" further tightening of monetary policy "may well be needed." In holding policy steady, the RBA cited the cumulative tightening to date, evidence that inflation has peaked and a cautious outlook for consumer spending. Household fundamentals suggest consumer spending will remain subdued, given falling real household incomes and rising household interest costs. After the RBA's pause, we believe the bar to resume rate hikes has risen, and we do not think the bar will be met.

As we wrote in [International Review](#), while inflation does remain elevated, consumer prices decelerated in the first quarter of this year, and underlying measures of inflation are also heading lower. Overall, given signs that inflation has already peaked, we maintain our current forecast that the RBA will hold rates steady again in May.

**Eurozone CPI & European Central Bank • Tuesday/Thursday**

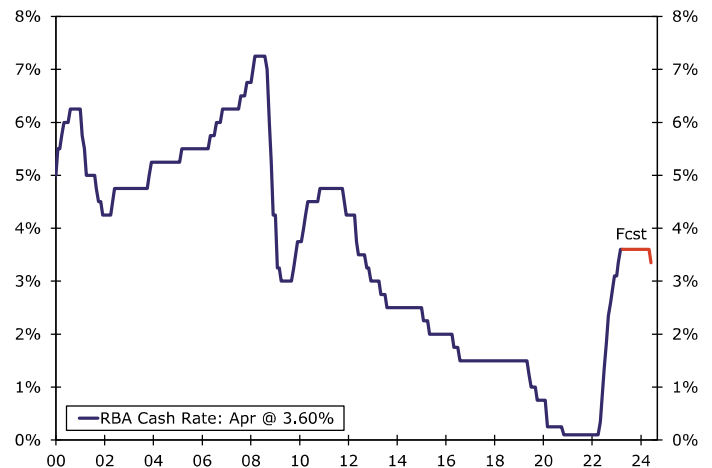
Next week will be a busy one for the Eurozone. Market participants will likely be closely following the April CPI data on Tuesday to gather insights on what the European Central Bank's (ECB) will do at its monetary policy meeting on Thursday.

While the headline measure of inflation has steadily receded from its October peak (6.9% in March vs. 10.7% in October), underlying inflation has continued to climb higher and has not shown signs of peaking or heading lower yet. In March, core inflation quickened to 5.7%. ECB Chief Economist Philip Lane has signaled more monetary tightening to come, as "the current data are indicating that we should raise rates again." This sentiment has been echoed by other ECB policymakers as well.

The consensus estimate expects headline inflation to have actually ticked up slightly in April to 7.0% year-over-year, while core inflation should recede slightly to 5.6%. For the May meeting, we and the consensus expect a 25 bps hike, bringing the Deposit Rate to 3.25%. Longer term, the market is pricing a terminal rate of 3.62%, though we currently forecast a slower trek upward to a lower terminal rate of 3.50% with two 25 bps rate hikes in May and June.

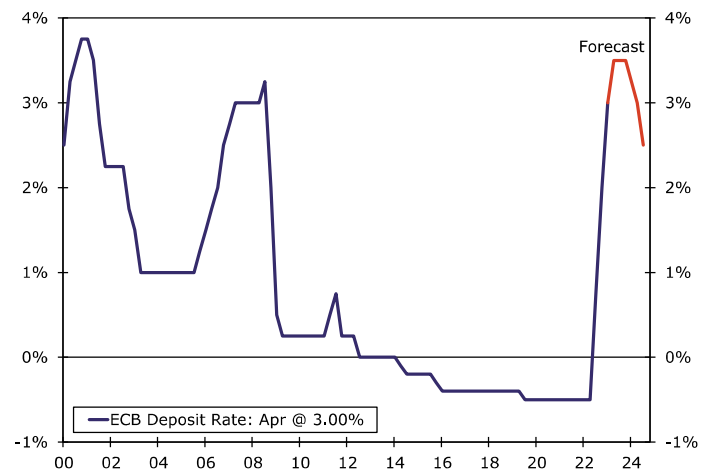
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Reserve Bank of Australia Policy Rate



Source: Bloomberg Finance L.P. and Wells Fargo Economics

European Central Bank Deposit Rate



Source: Bloomberg Finance L.P. and Wells Fargo Economics

## Credit Market Insights

### Corporate Bond Spreads Hanging In

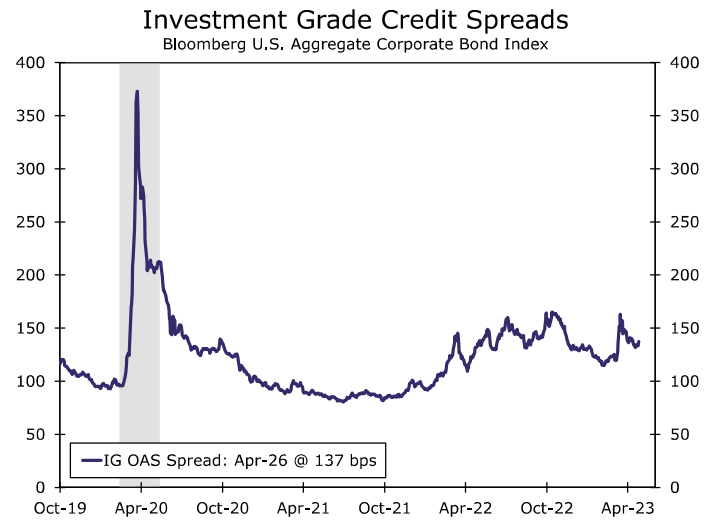
Corporate bond spreads are one financial market measure that signal investor sentiment about the economic outlook. When corporate bond spreads widen, it can be a sign that investors are demanding additional compensation for the risk of lending businesses money.

Investment grade bond spreads began widening in 2022 as monetary policy tightening ramped up and the probability of a recession began to rise. More recently, spreads widened in the wake of the two regional bank failures that occurred in March. However, spreads have retraced about half of that widening since the mid-March peak and are back to roughly the same level they were a year ago ([chart](#)).

Financial conditions more broadly have exhibited a similar pattern over the past year, at times tightening during periods of heightened uncertainty or weak economic data and then easing as the episode subsides. The S&P 500 index is down 13% from its peak but, like corporate bond spreads, is roughly flat over the past year.

Corporate bond spreads that have widened but not yet hit levels consistent with a recession mirror the economic data, which have directionally softened but have not yet shown clear signs of an imminent contraction in the economy. Real GDP has grown 1.6% over the past year and employment has risen an even stronger 2.7%. The more recent Q1 economic data showed some signs of softening but were undeniably strong enough to make clear that the U.S. economy has not yet entered a recession. The risk of a recession later this year or in 2024 is clearly elevated, but for now, the economy continues to expand at a moderate pace.

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Source: Bloomberg Finance L.P. and Wells Fargo Economics



## Topic of the Week

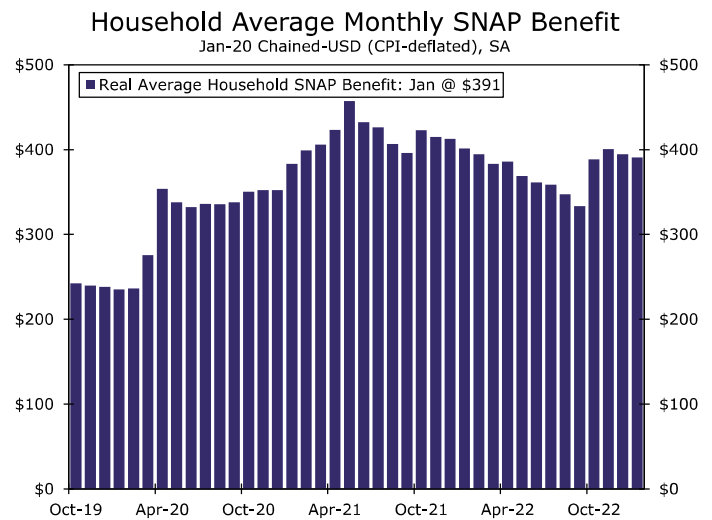
### Up Close on SNAP

This week, House Republicans passed a bill that would require substantive spending cuts in exchange for raising the federal debt ceiling. Included within the bill was a proposed change to the eligibility guidelines for the Supplemental Nutrition Assistance Program (SNAP). The SNAP program provides subsidies to lower income households to supplement their grocery budget. The new eligibility guidelines would extend work requirements to those aged 50-55 in order to receive the benefit, up from current requirements for those aged under 50. Benefits in the program are fully funded by the federal government, and states split the cost of administering the program with the federal government. The SNAP program accounted for 3% of federal outlays for social benefits in Q4-2022, though the program is dwarfed in size by other benefit programs such as Social Security and Medicare that together comprised over half of federal benefit outlays.

Notably, the benefit is included within the BEA's calculation of personal income. Prior to the pandemic, the real average monthly household benefit hovered around \$240 per recipient household ([chart](#)). Benefits went up in 2020 as Congress passed fiscal aid packages, including the Families First Coronavirus Response Act. The real benefit households received in the following months eroded away as the cost of food at home rose at a historically high pace. Benefits then spiked again in the past few months due to a cost of living adjustment stemming from rising food costs. However, the emergency allotments enacted to increase benefits during the pandemic ended in February. With decreasing nominal benefits and still rising food prices, the real benefit received by households could continue to decline when the February data are released by the USDA.

Decreased benefits for SNAP recipients could have broader implications for the economy. The program adds a significant monthly subsidy to a large swath of households' balance sheets. In FY-2022, there were over 41 million Americans receiving benefits from the program, or nearly one in eight Americans. One [estimate from Moody's Analytics](#) in 2021 pegged the fiscal multiplier of the SNAP program at 1.61. This estimation gauges that for every dollar spent on the program in Q1-2021, \$1.61 would be added to Q1-2022 GDP. Markedly, this was higher than Moody's estimates for the fiscal multipliers on both transportation infrastructure spending and defense spending, which it pegged at 1.29 and 1.24, respectively. The extent of SNAP's reach to consumers and its potential impacts on growth both make the influence of this program significant to the greater economy. For additional detail, check out our previous [special report](#) on the outlook for personal income drivers, including SNAP.

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Source: U.S. Department of Agriculture, U.S. Department of Labor and Wells Fargo Economics

## Market Data • Mid-Day Friday

U.S. Interest Rates			
	Friday 4/28/2023	1 Week Ago	1 Year Ago
SOFR	4.81	4.80	0.28
3-Month LIBOR	5.30	5.27	1.24
3-Month T-Bill	5.09	5.02	0.80
1-Year Treasury	4.53	4.46	1.97
2-Year Treasury	4.05	4.18	2.62
5-Year Treasury	3.53	3.66	2.84
10-Year Treasury	3.44	3.57	2.82
30-Year Treasury	3.67	3.78	2.89
Bond Buyer Index	3.53	3.56	3.21

Foreign Exchange Rates			
	Friday 4/28/2023	1 Week Ago	1 Year Ago
Euro (\$/€)	1.104	1.099	1.050
British Pound (\$/£)	1.258	1.243	1.246
British Pound (£/€)	0.878	0.884	0.843
Japanese Yen (¥/\$)	136.090	134.160	130.850
Canadian Dollar (C\$/\\$)	1.357	1.354	1.281
Swiss Franc (CHF/\\$)	0.891	0.892	0.972
Australian Dollar (US\$/A\\$)	0.661	0.669	0.710
Mexican Peso (MXN/\\$)	18.002	17.988	20.446
Chinese Yuan (CNY/\\$)	6.913	6.891	6.627
Indian Rupee (INR/\\$)	81.833	82.098	76.489
Brazilian Real (BRL/\\$)	5.007	5.049	4.942
U.S. Dollar Index	101.495	101.822	103.623

Foreign Interest Rates			
	Friday 4/28/2023	1 Week Ago	1 Year Ago
3-Month Euro LIBOR	-0.58	-0.59	-0.57
3-Month Sterling LIBOR	4.61	4.59	1.21
3-Month Canada Banker's Acceptance	5.04	5.05	1.75
3-Month Yen LIBOR	-0.03	-0.03	-0.08
2-Year German	2.70	2.92	0.20
2-Year U.K.	3.78	3.75	1.54
2-Year Canadian	3.68	3.74	2.53
2-Year Japanese	-0.04	-0.04	-0.05
10-Year German	2.32	2.48	0.90
10-Year U.K.	3.72	3.76	1.88
10-Year Canadian	2.87	2.94	2.79
10-Year Japanese	0.39	0.47	0.23

Commodity Prices			
	Friday 4/28/2023	1 Week Ago	1 Year Ago
WTI Crude (\\$/Barrel)	76.33	77.87	105.36
Brent Crude (\\$/Barrel)	79.49	81.66	107.59
Gold (\\$/Ounce)	1991.42	1983.06	1894.45
Hot-Rolled Steel (\\$/S.Ton)	1072.00	1178.00	1390.00
Copper (¢/Pound)	386.40	398.00	441.35
Soybeans (\\$/Bushel)	14.25	14.84	17.04
Natural Gas (\\$/MMBTU)	2.40	2.23	6.89
Nickel (\\$/Metric Ton)	24,062	24,923	33,281
CRB Spot Inds.	559.06	560.42	678.57

Source: Bloomberg Finance L.P. and Wells Fargo Economics

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