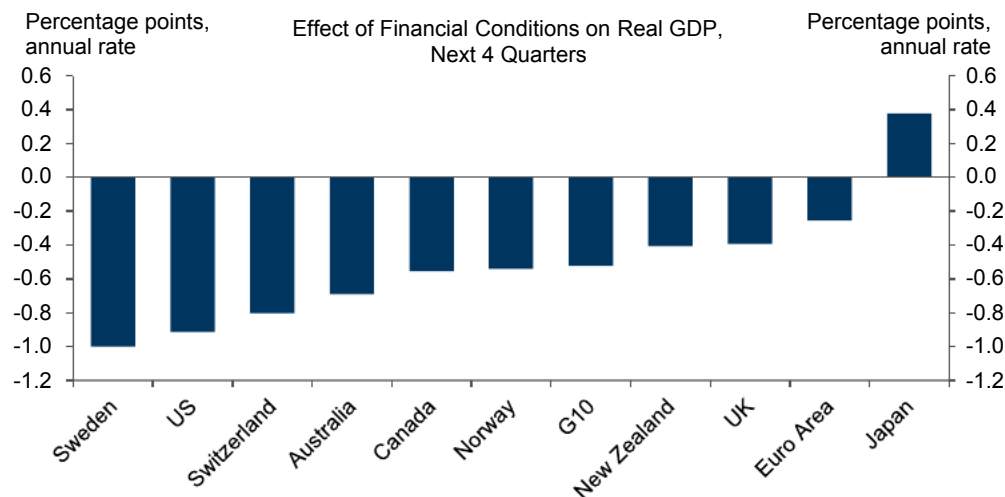


# Global: GS Economic Indicators: Following Recent Easing, the G10 FCI Growth Drag Stands at 1/2pp Over the Next Year (Zhestkova)

## Chart of the Week

**Exhibit 1: Following Recent Easing, the G10 FCI Growth Drag Stands at 1/2pp Over the Next Year**



We compute this measure using three quarter centered moving average FCI growth impulses from 2022Q3 to 2023Q2. For more information, see: "Global Economics Comment: FCIs: A Headwind in the US, A Tailwind in Japan (Bhushan)"

Source: Goldman Sachs Global Investment Research

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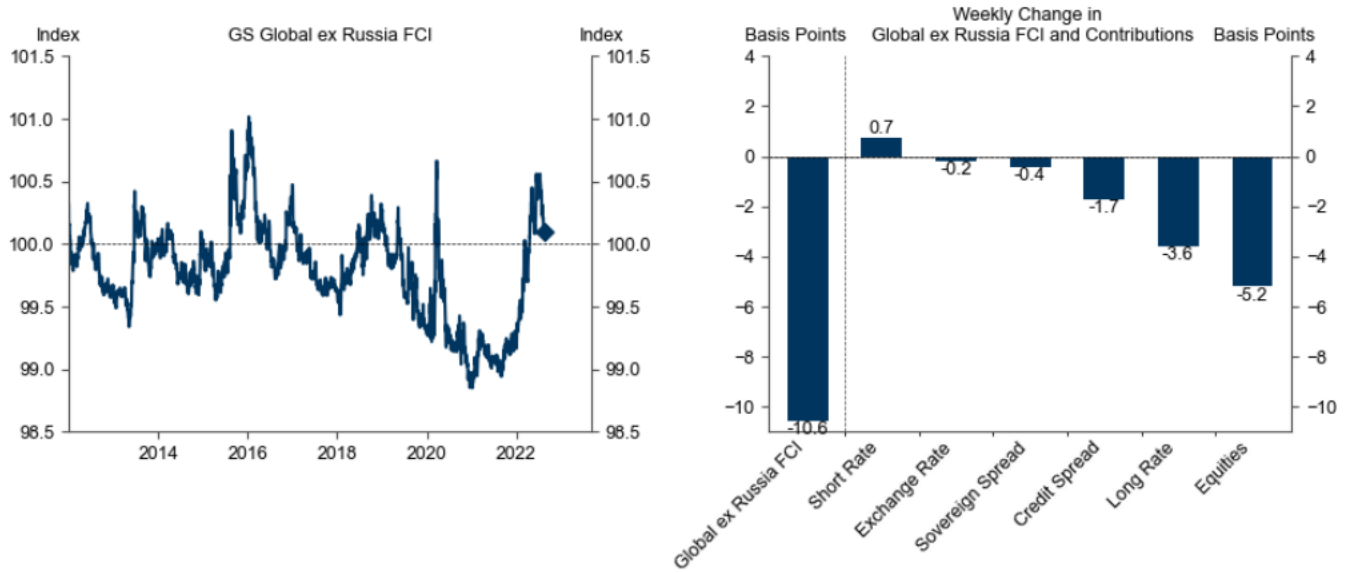
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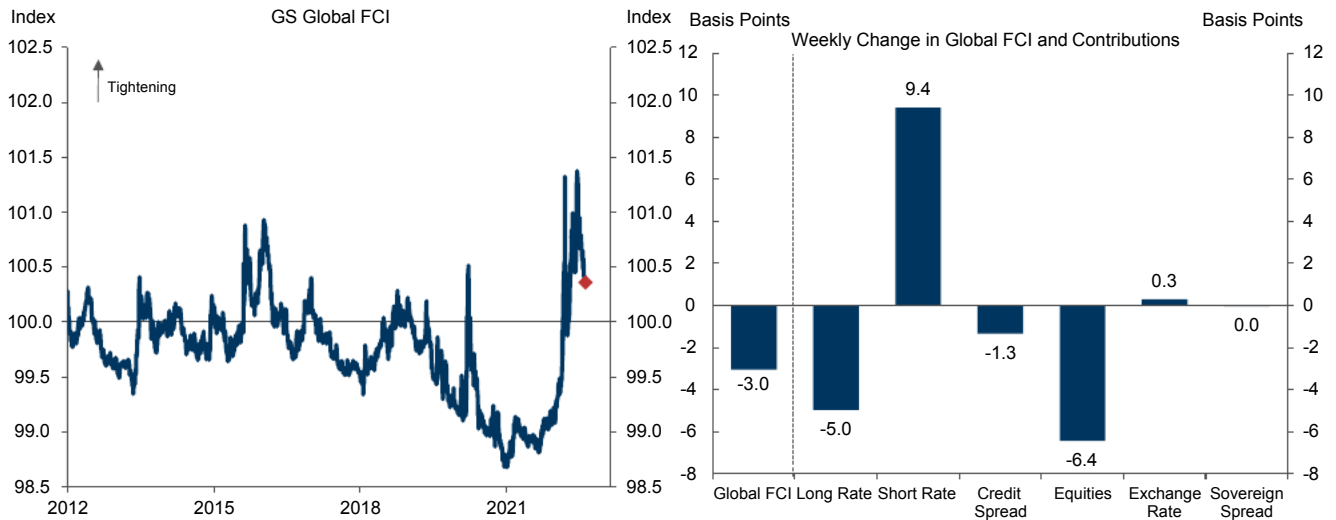
**Key FCI and Growth Charts**

**Exhibit 2: The Global ex Russia FCI Loosened Driven Primarily by Equities and the Long Rate**



Source: Goldman Sachs Global Investment Research

**Exhibit 3: The Global FCI Loosened Driven Primarily by Equities and the Long Rate, and Offset by the Short Rate**



Source: Goldman Sachs Global Investment Research

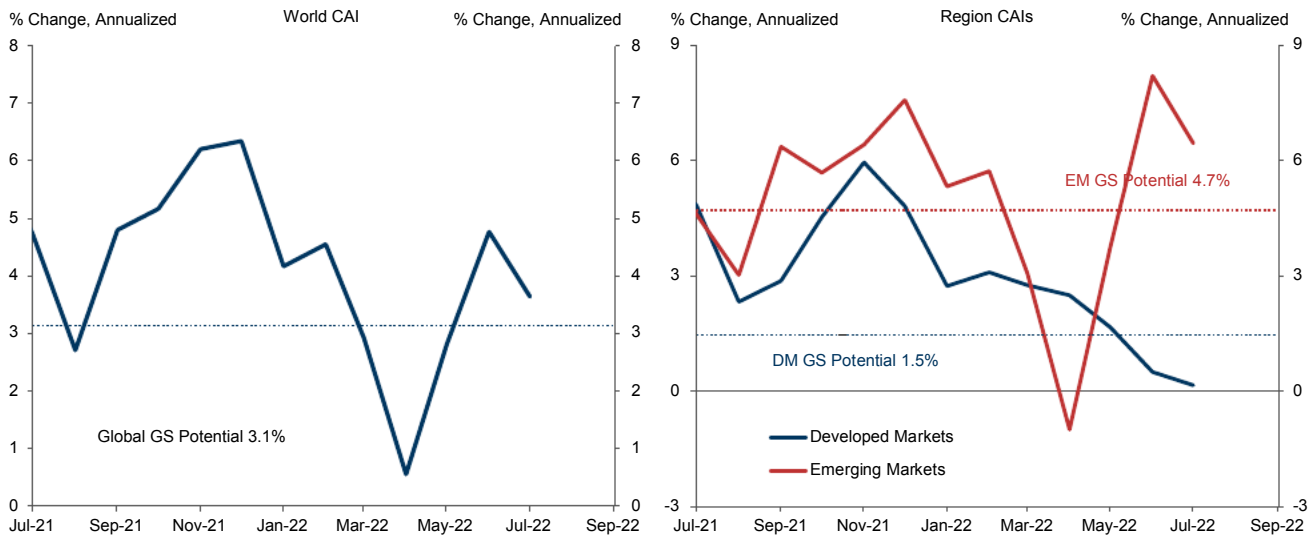
**Exhibit 4: Our July CAI Rose in Norway to +4.0% and Fell in New Zealand to -0.6%**

Country (% of Data Released)	Month	Spot CAI (% mom annualized)		3 Month Average CAI (% mom annualized)
		Value	Weekly Change	
<b>Global</b>	July	+3.6	+0.4	+3.7
<b>Developed Markets</b>	July	+0.1	+0.1	+0.8
US (80%)	July	-0.3	+0.1	-0.4
Euro Area (38%)	July	+0.7	+0.1	+2.0
Germany (47%)	July	-1.0	+0.1	+0.9
France (37%)	July	+0.7	+0.1	+1.6
Italy (34%)	July	-0.3	+0.2	+1.0
Spain (38%)	July	+2.6	0.0	+3.7
Japan (51%)	July	-0.5	+0.2	+0.5
UK (54%)	July	-2.1	-0.2	-0.5
Canada (30%)	July	+1.2	-0.1	+2.1
Australia (61%)	July	+3.2	-0.1	+3.7
New Zealand (80%)	July	-0.6	-0.9	-0.3
Norway (37%)	July	+4.0	+2.2	+2.1
Sweden (78%)	July	-0.6	-0.1	+1.8
<b>Emerging Markets</b>	July	+6.4	+0.7	+6.1
China (97%)	July	+9.0	+1.6	+8.0
India (52%)	July	+7.7	+0.5	+8.0
Brazil (63%)	July	+3.2	0.0	+4.3
Russia (27%)	July	+5.4	-0.6	+3.6

CAI in countries with 0% of data released is forecasted.

Source: Goldman Sachs Global Investment Research

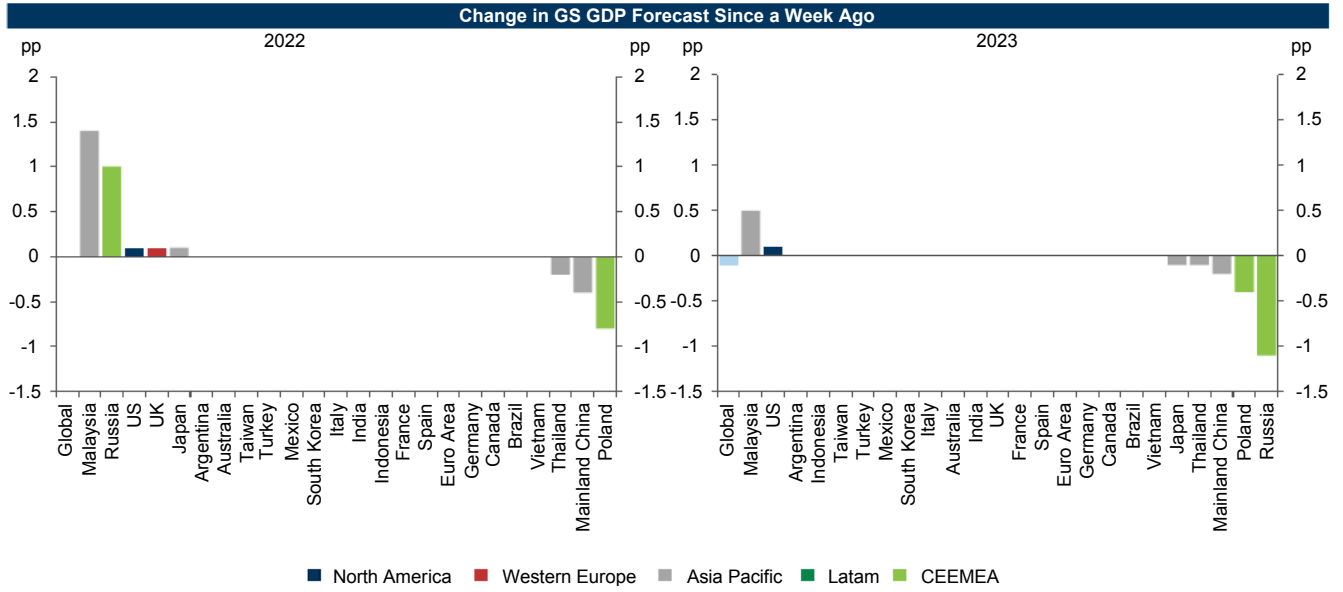
**Exhibit 5: Our Global July CAI Fell in July Driven By a Slowdown in Both EM and DM Growth**



GS DM potential is a PPP weighted average of the US, Germany, France, Italy, Spain, Japan, the UK, and Canada and EM is of Brazil, Russia, India, and China. Global GS potential is an average of all aforementioned countries.

Source: Goldman Sachs Global Investment Research

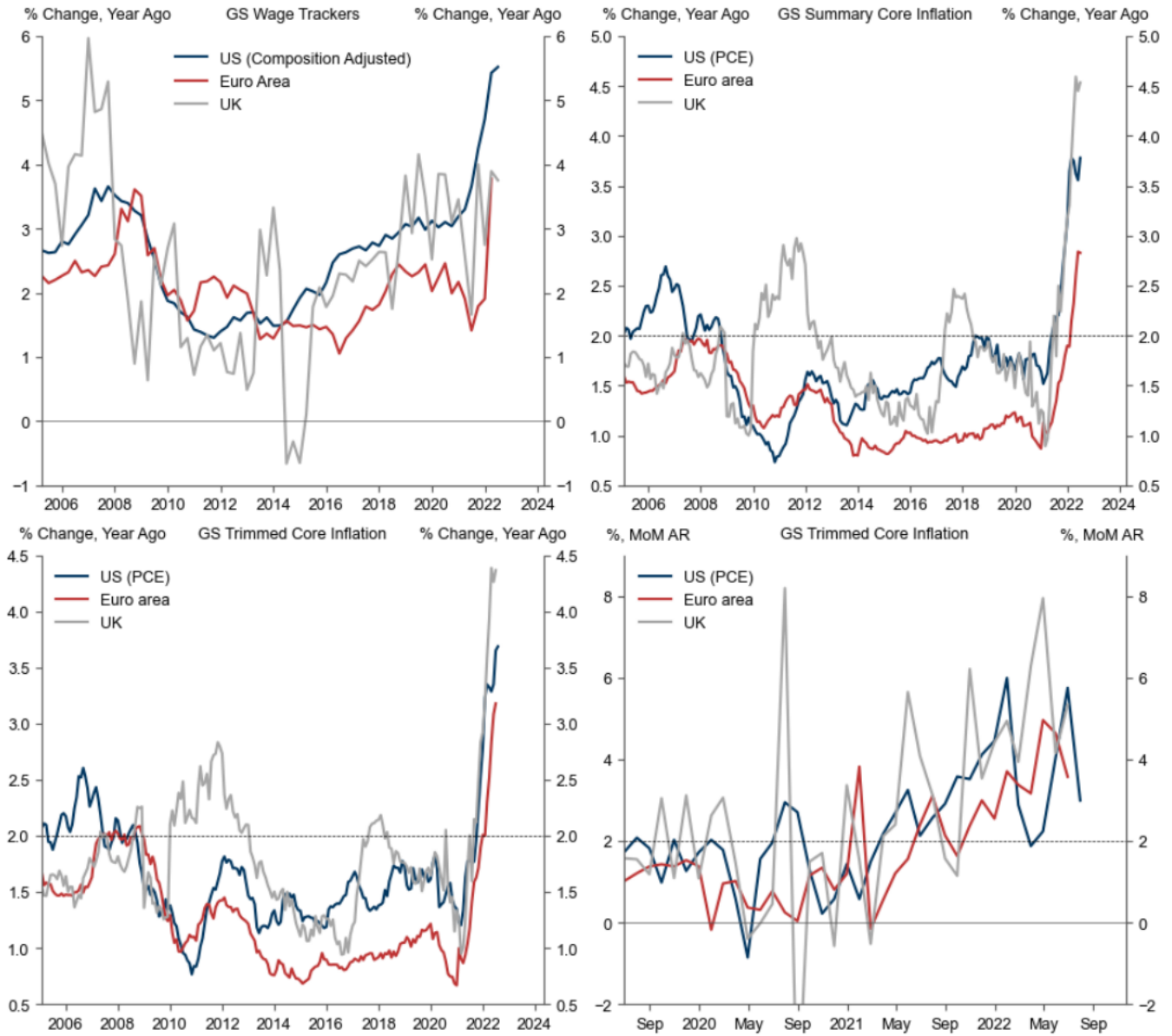
**Exhibit 6: More Growth in Malaysia and Less Growth in Poland**



Source: Goldman Sachs Global Investment Research

**Key Wage and Price Inflation Charts**

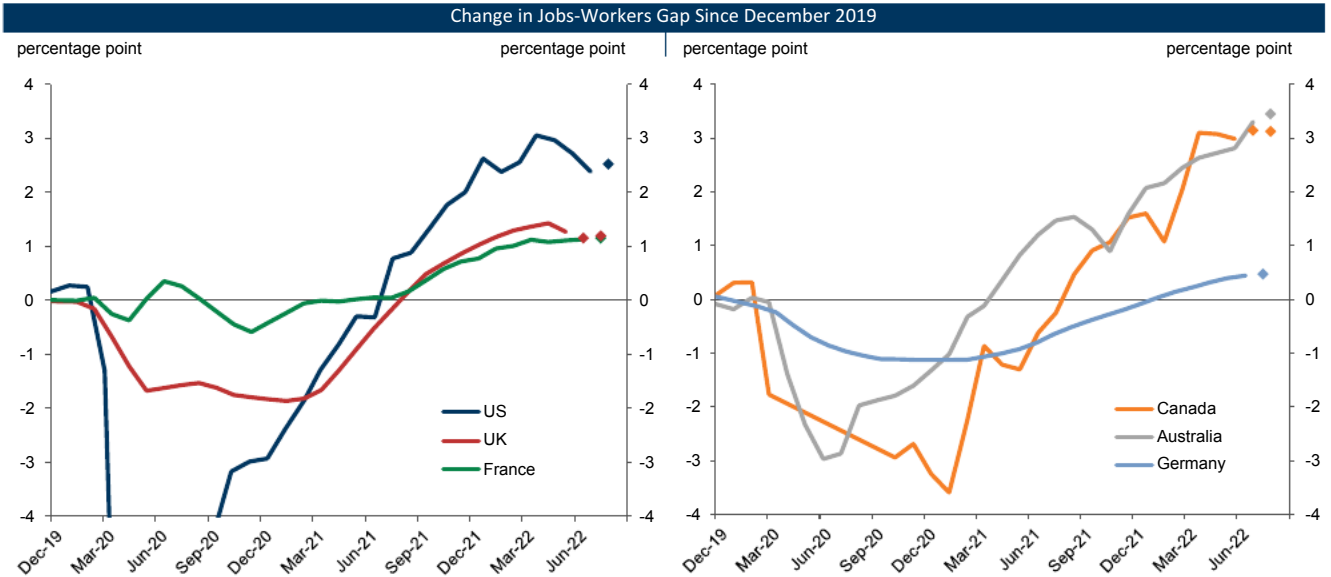
**Exhibit 7: GS Wage Trackers and Inflation Measures**



The most recent US PCE values are forecasted.

Source: Goldman Sachs Global Investment Research

**Exhibit 8: GS Jobs-Workers Gaps**

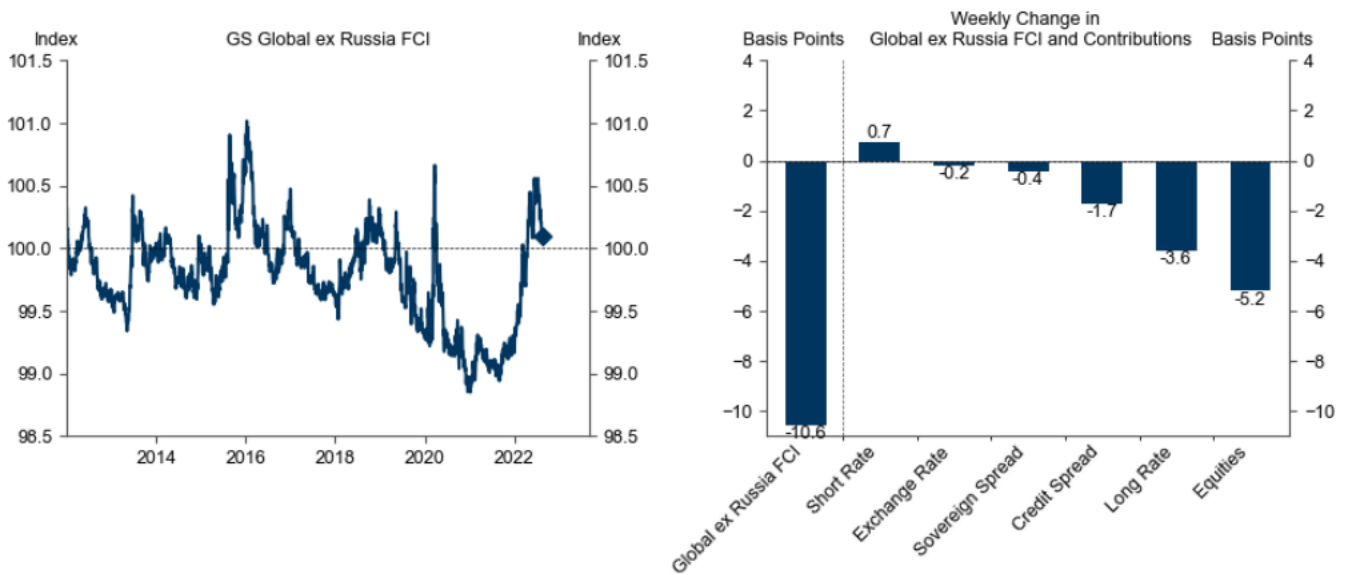


Source: Goldman Sachs Global Investment Research

## Detailed Indicators Update

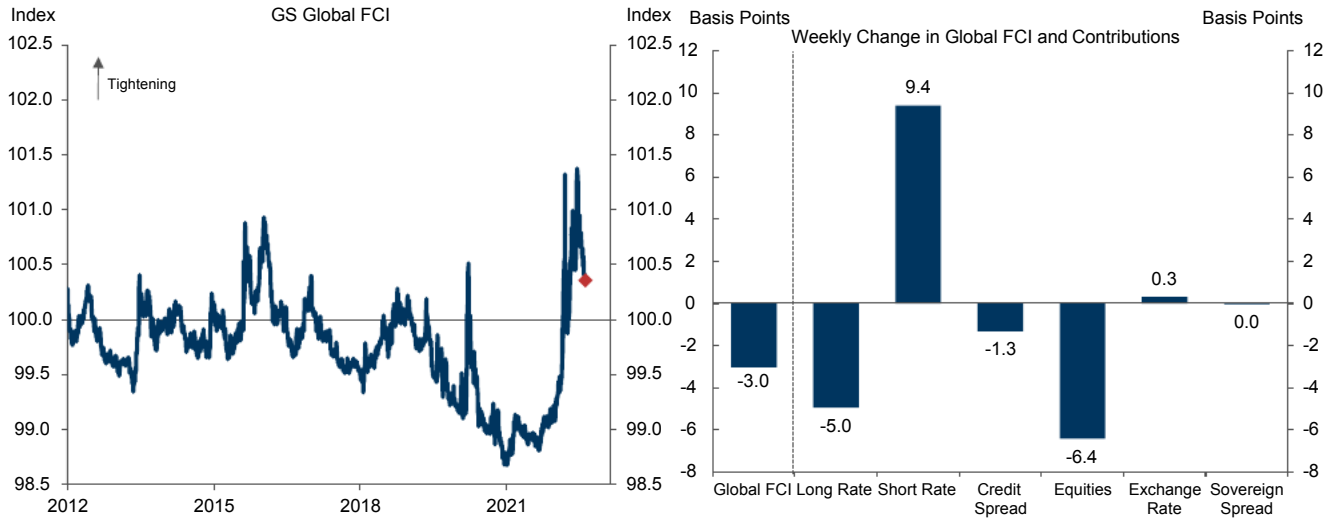
### Financial Conditions Index (FCI)

**Exhibit 9: GS Global ex Russia FCI Level (Left) and Weekly Change With Contributions (Right)**



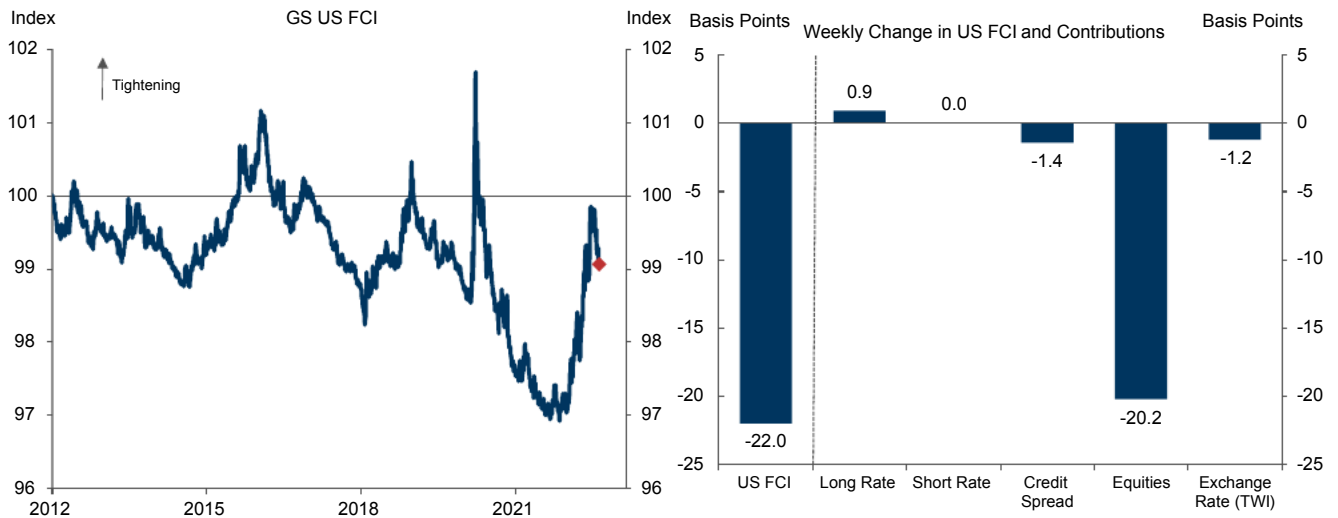
Source: Goldman Sachs Global Investment Research

**Exhibit 10: GS Global FCI Level (Left) and Weekly Change With Contributions (Right)**



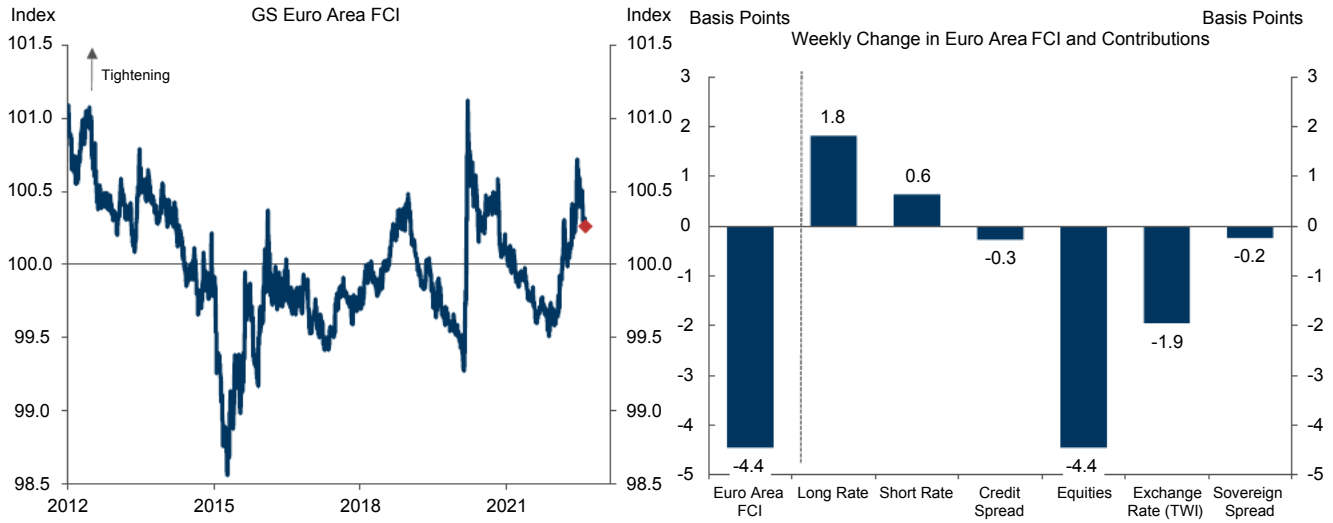
Source: Goldman Sachs Global Investment Research

**Exhibit 11: GS US FCI Level (Left) and Weekly Change With Contributions (Right)**



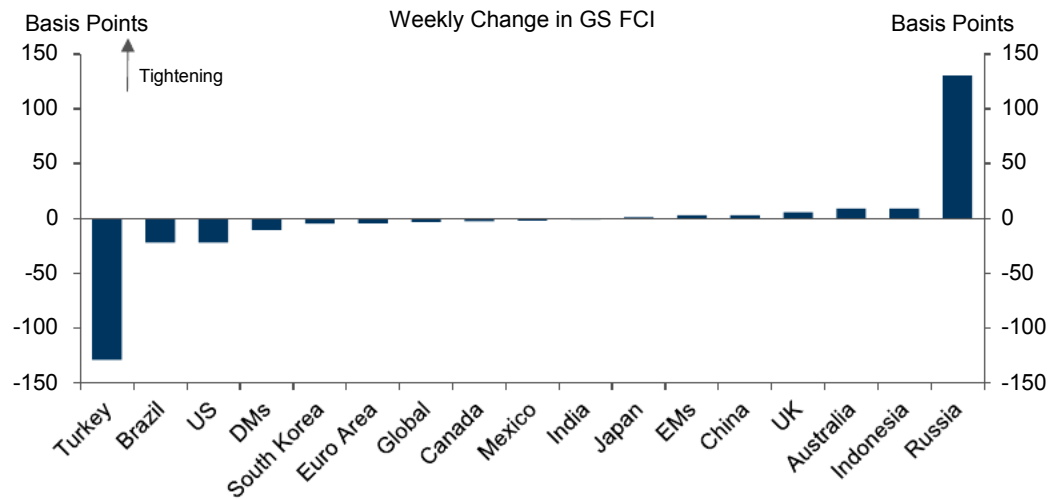
Source: Goldman Sachs Global Investment Research

**Exhibit 12: GS Euro Area FCI Level (Left) and Weekly Change With Contributions (Right)**



Source: Goldman Sachs Global Investment Research

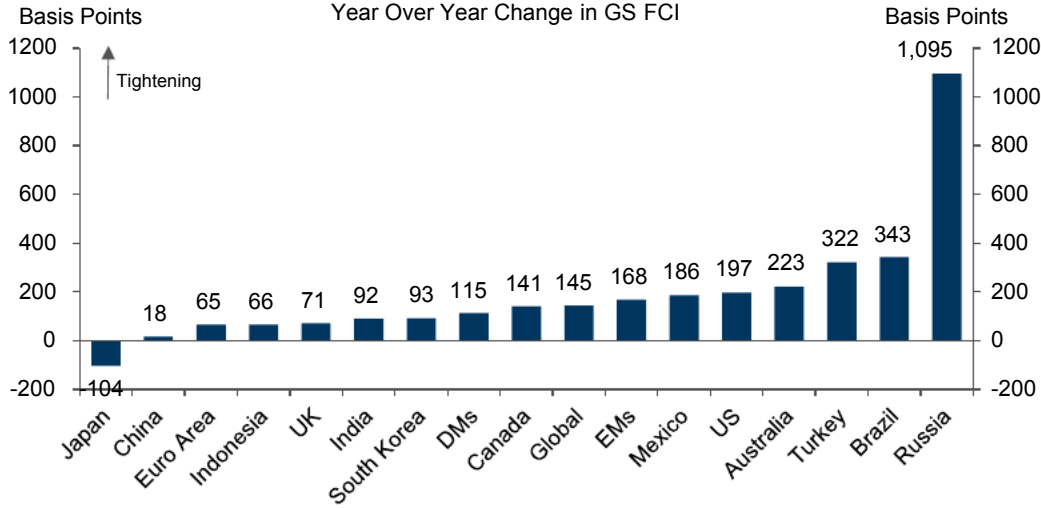
**Exhibit 13: Weekly Change in FCI Across Countries**



Source: Goldman Sachs Global Investment Research



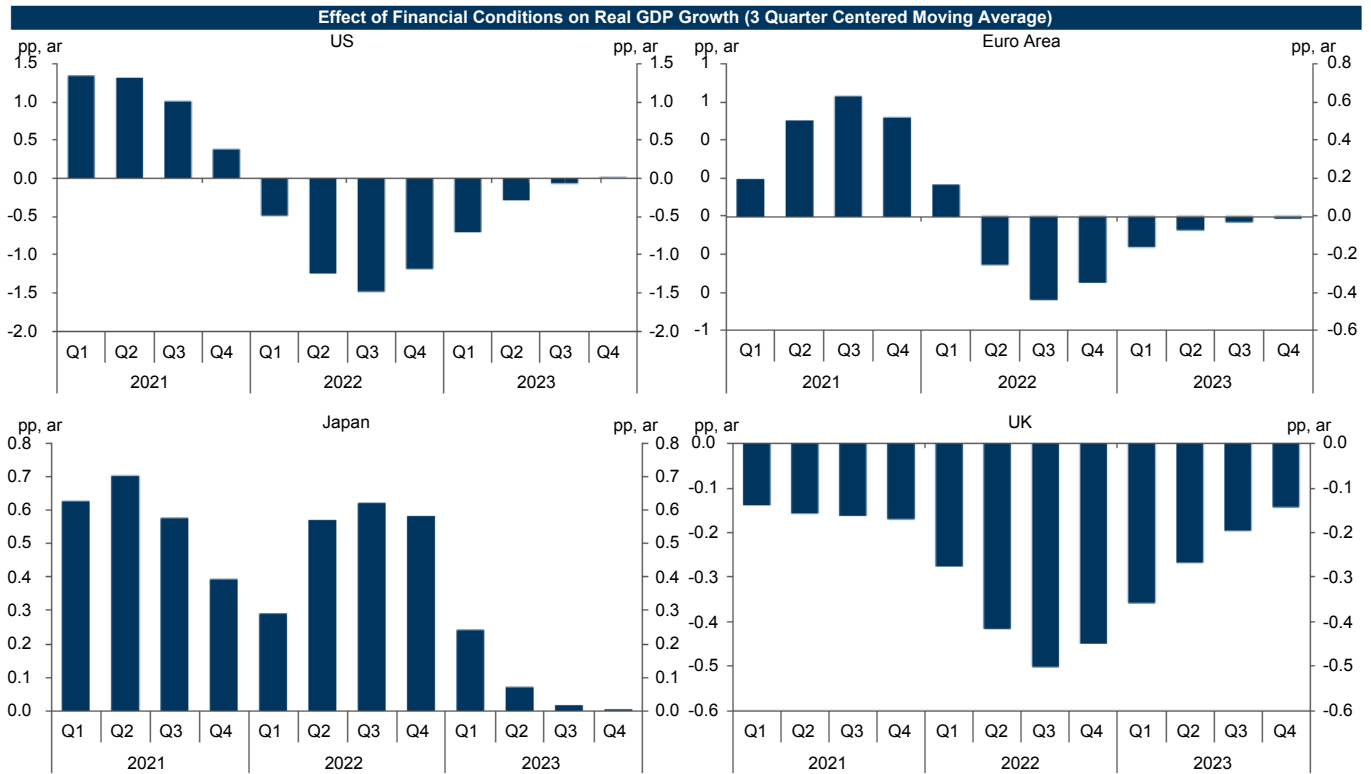
Exhibit 14: Year Over Year Change in FCI Across Countries



Source: Goldman Sachs Global Investment Research

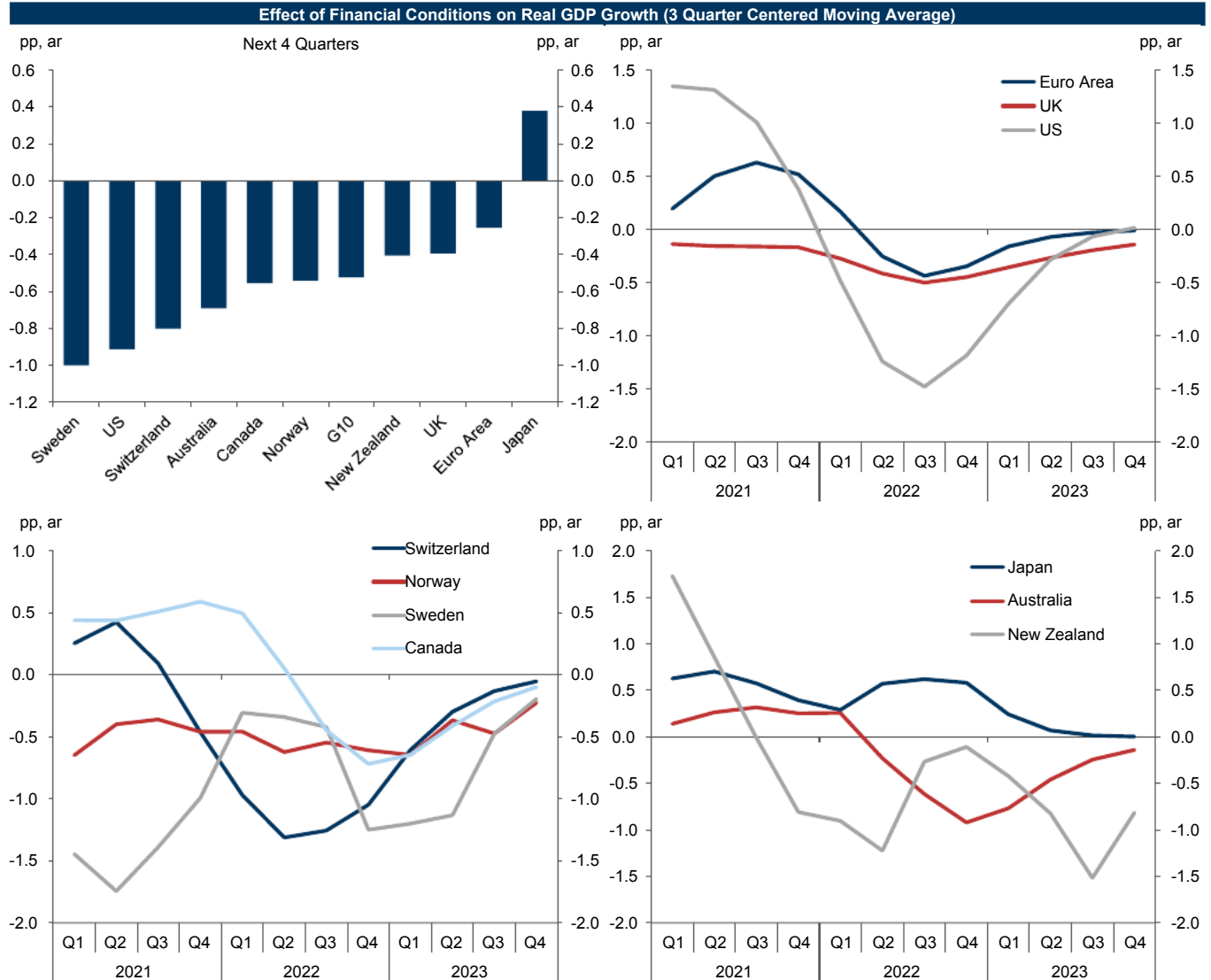
**FCI Impulses**

**Exhibit 15: FCI Impulses in the US, Euro Area, Japan, and UK**



Source: Goldman Sachs Global Investment Research

Exhibit 16: FCI Impulses: Detailed View

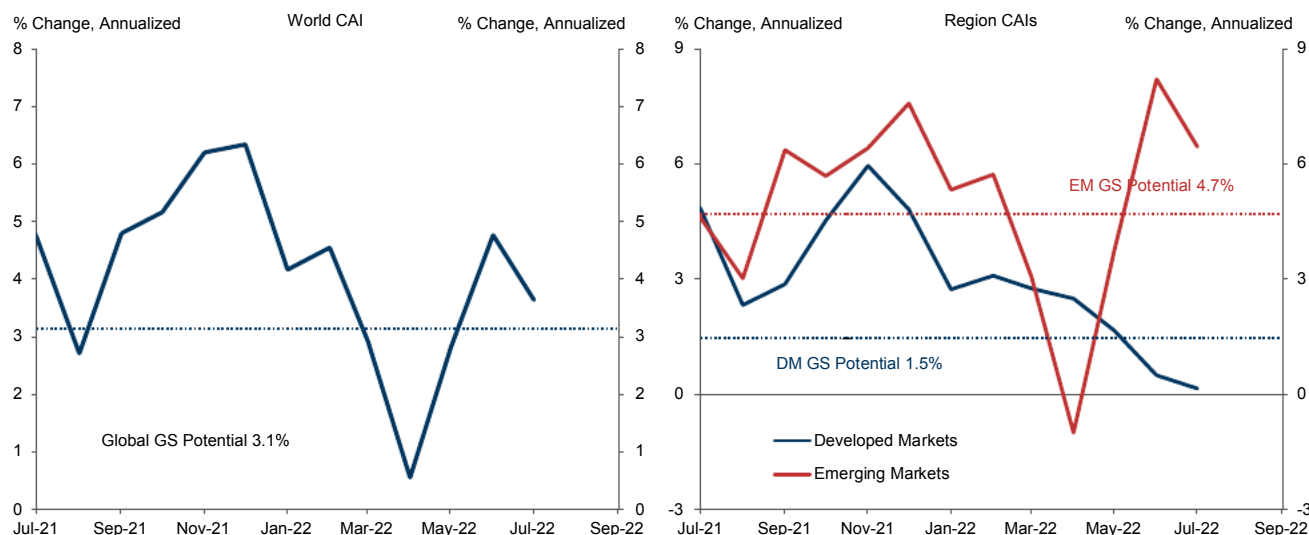


We compute the 4 quarter measure using average FCI growth impulses from 2022Q3 to 2023Q2.

Source: Goldman Sachs Global Investment Research

### Current Activity Indicator (CAI)

Exhibit 17: CAI Aggregates



GS DM potential is a PPP weighted average of the US, Germany, France, Italy, Spain, Japan, the UK, and Canada and EM is of Brazil, Russia, India, and China. Global GS potential is an average of all aforementioned countries.

Source: Goldman Sachs Global Investment Research

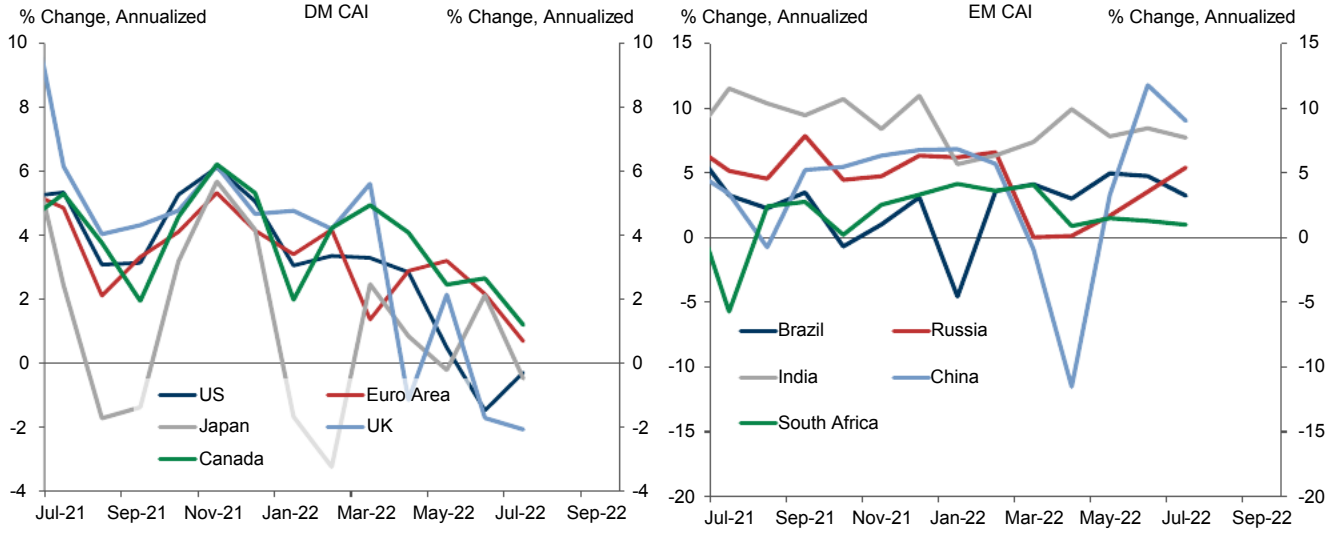
Exhibit 18: CAI Heatmap

Country (% of Data Released)	Month	Spot CAI (% mom annualized)		3 Month Average CAI (% mom annualized)
		Value	Weekly Change	
<b>Global</b>	July	+3.6	+0.4	+3.7
<b>Developed Markets</b>	July	+0.1	+0.1	+0.8
US (80%)	July	-0.3	+0.1	-0.4
Euro Area (38%)	July	+0.7	+0.1	+2.0
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Canada (30%)	July	+1.2	-0.1	+2.1
Australia (61%)	July	+3.2	-0.1	+3.7
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India (52%)	July	+7.7	+0.5	+8.0
Brazil (63%)	July	+3.2	0.0	+4.3
Russia (27%)	July	+5.4	-0.6	+3.6

CAI in countries with 0% of data released is forecasted.

Source: Goldman Sachs Global Investment Research

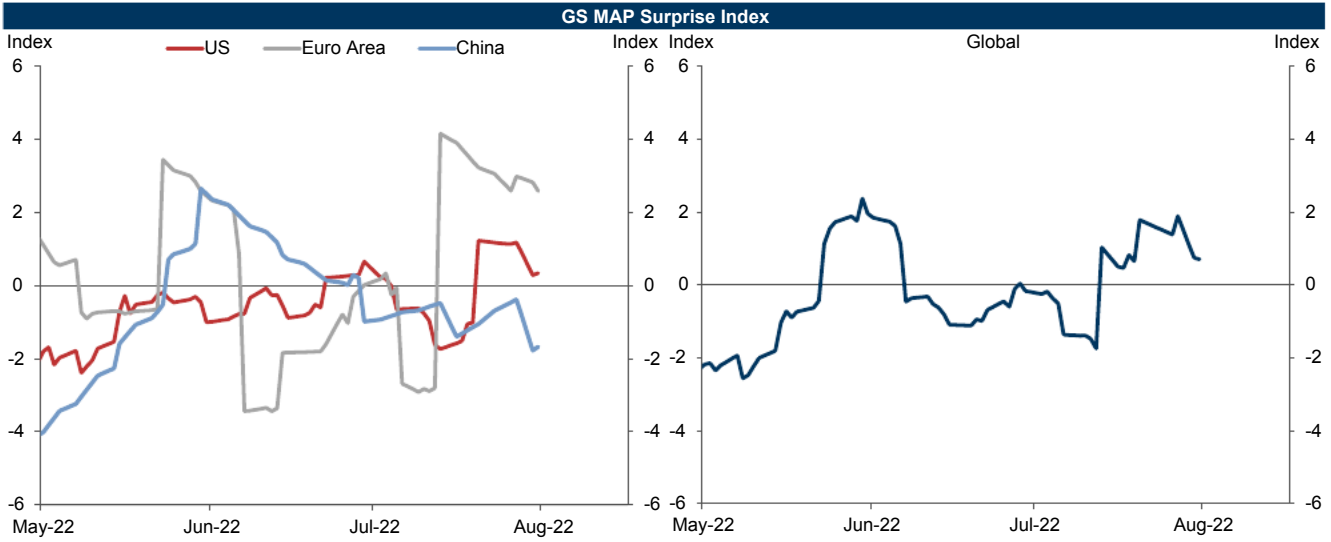
**Exhibit 19: CAIs for Large DMs and EMs**



Source: Goldman Sachs Global Investment Research

MAP

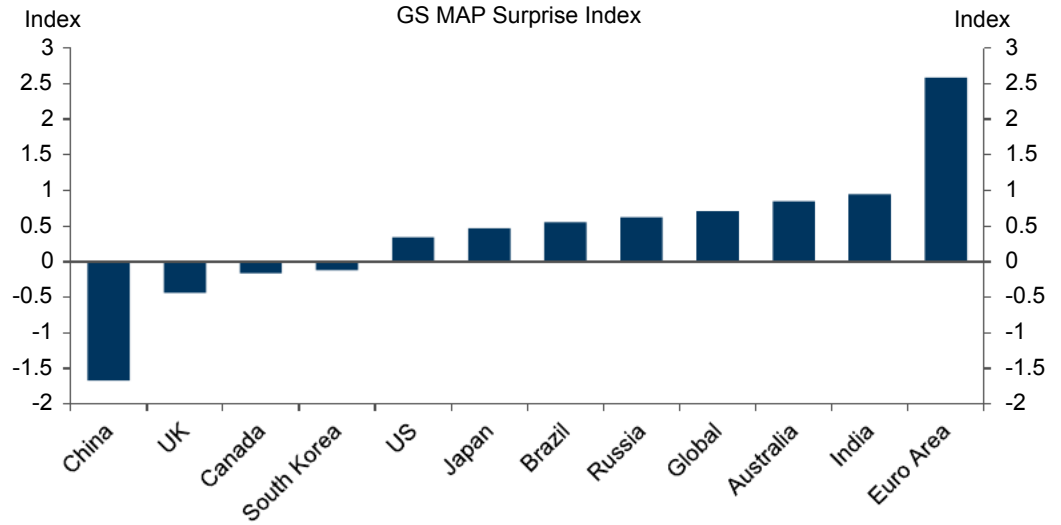
Exhibit 20: GS MAP Surprise Index



We present the 21 day moving average of daily MAP scores.

Source: Goldman Sachs Global Investment Research

Exhibit 21: Latest GS MAP Surprise Index

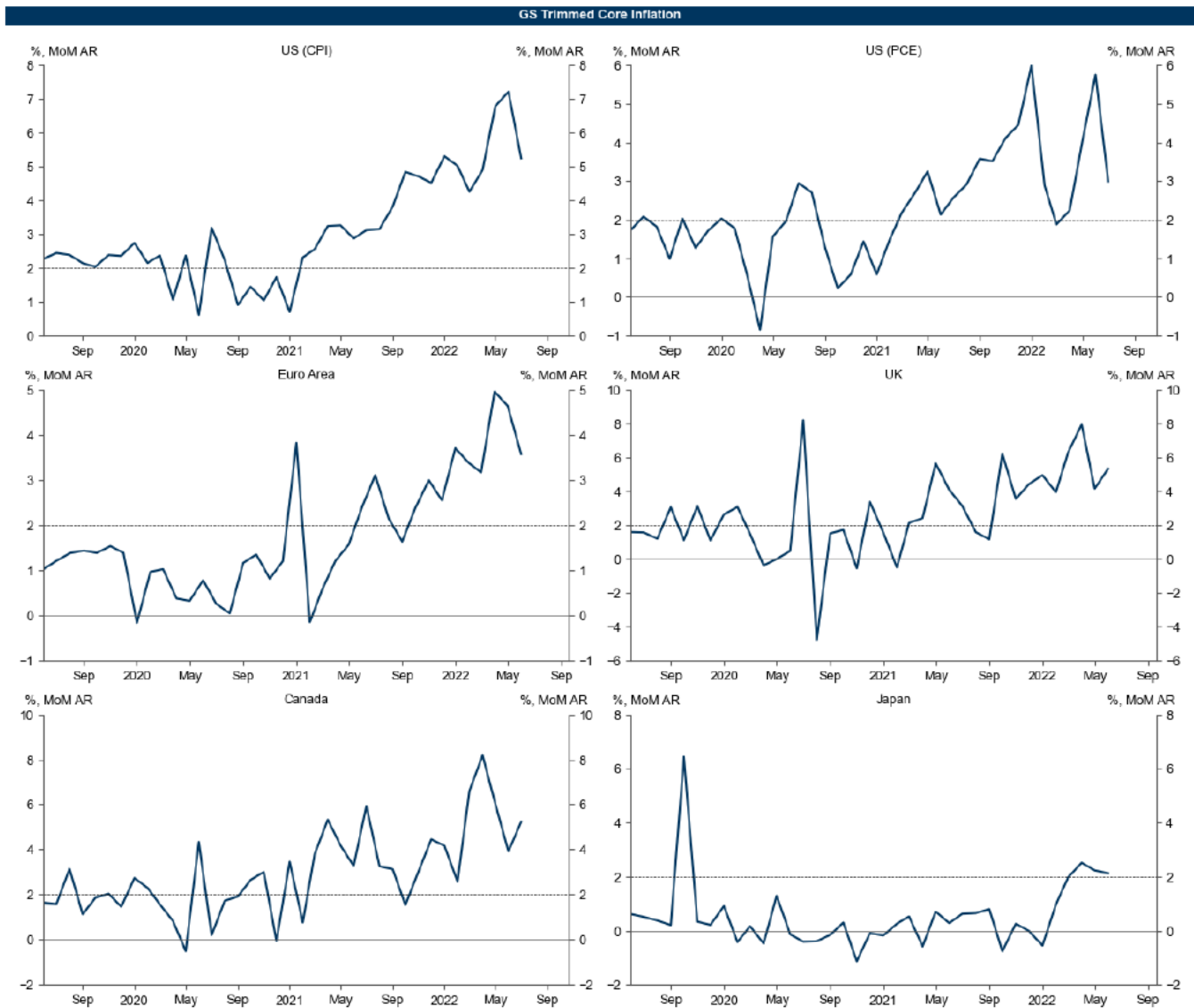


We present the 21 day moving average of daily MAP scores.

Source: Goldman Sachs Global Investment Research

### Trimmed Core Inflation

Exhibit 22: GS Trimmed Core Inflation

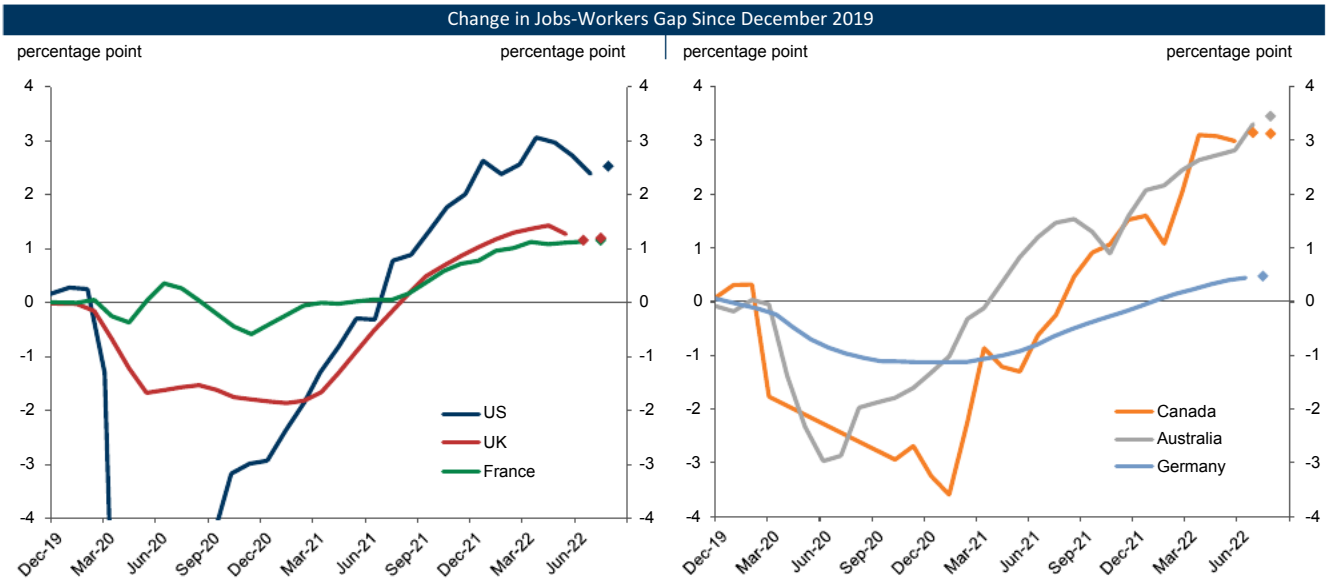


The most recent US PCE values are forecasted.

Source: Goldman Sachs Global Investment Research

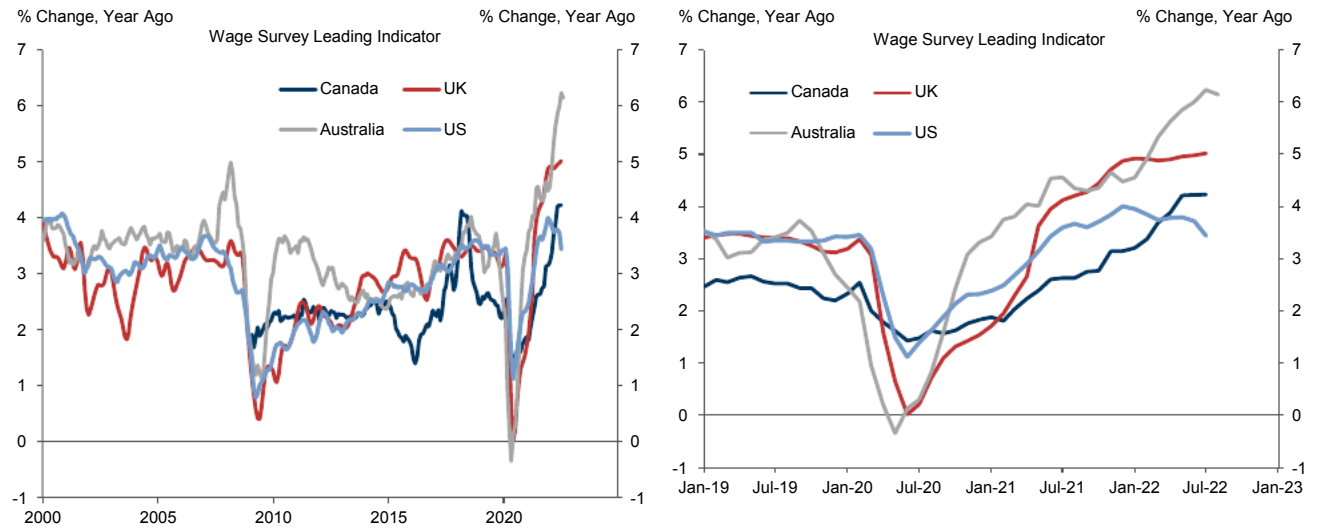
### Wage Trackers

Exhibit 23: GS Jobs-Workers Gaps



Source: Goldman Sachs Global Investment Research

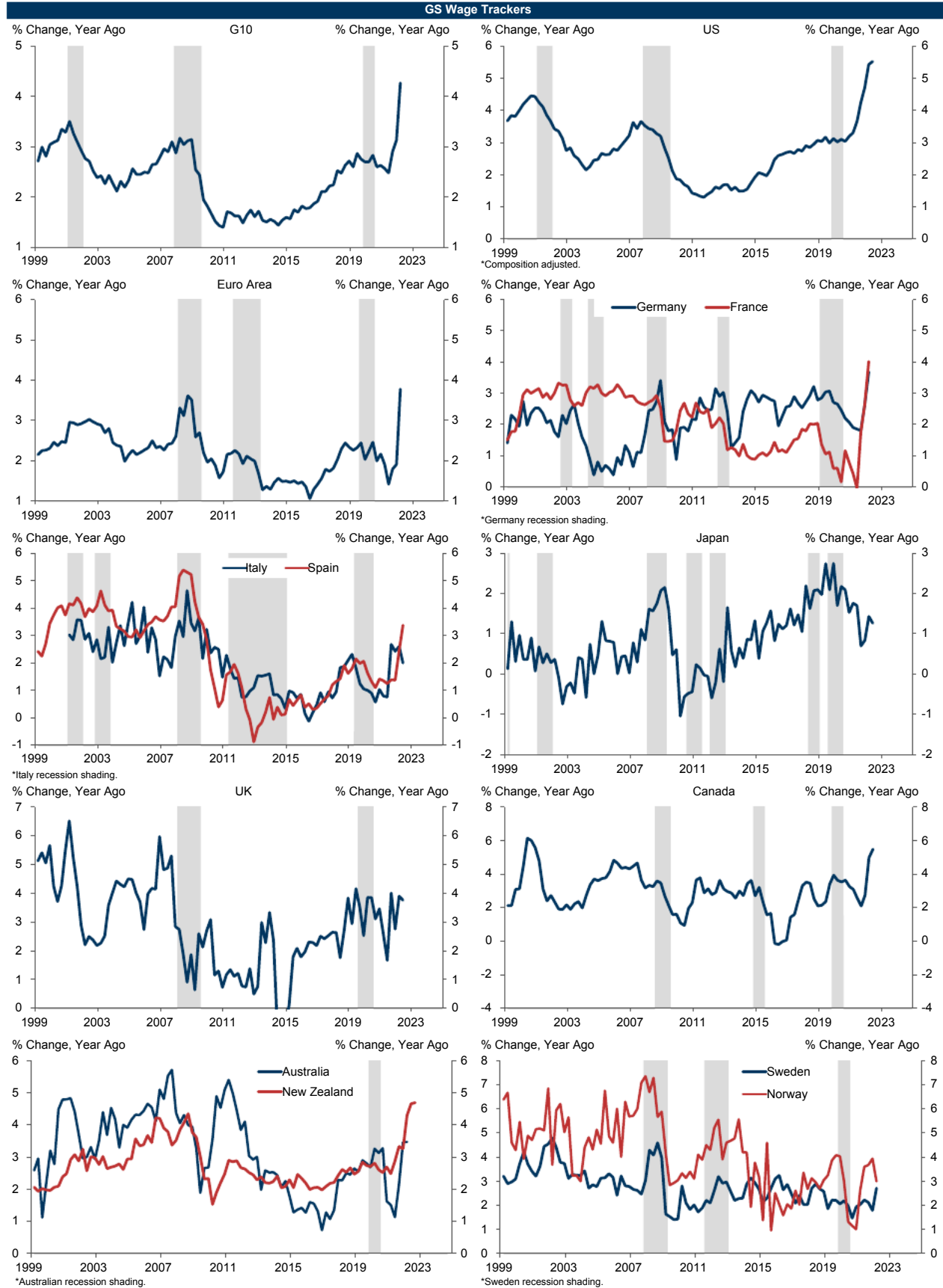
Exhibit 24: Wage Survey Leading Indicators



Source: Goldman Sachs Global Investment Research



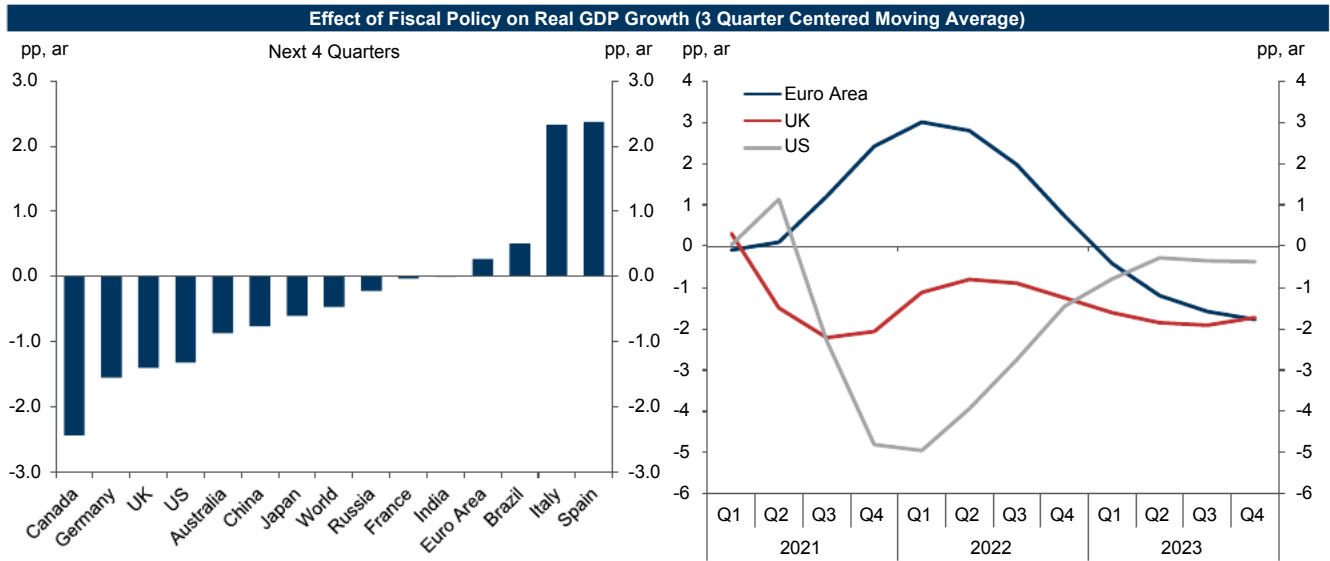
Exhibit 25: Wage Trackers



Source: Goldman Sachs Global Investment Research

### Top Down Fiscal Impulses

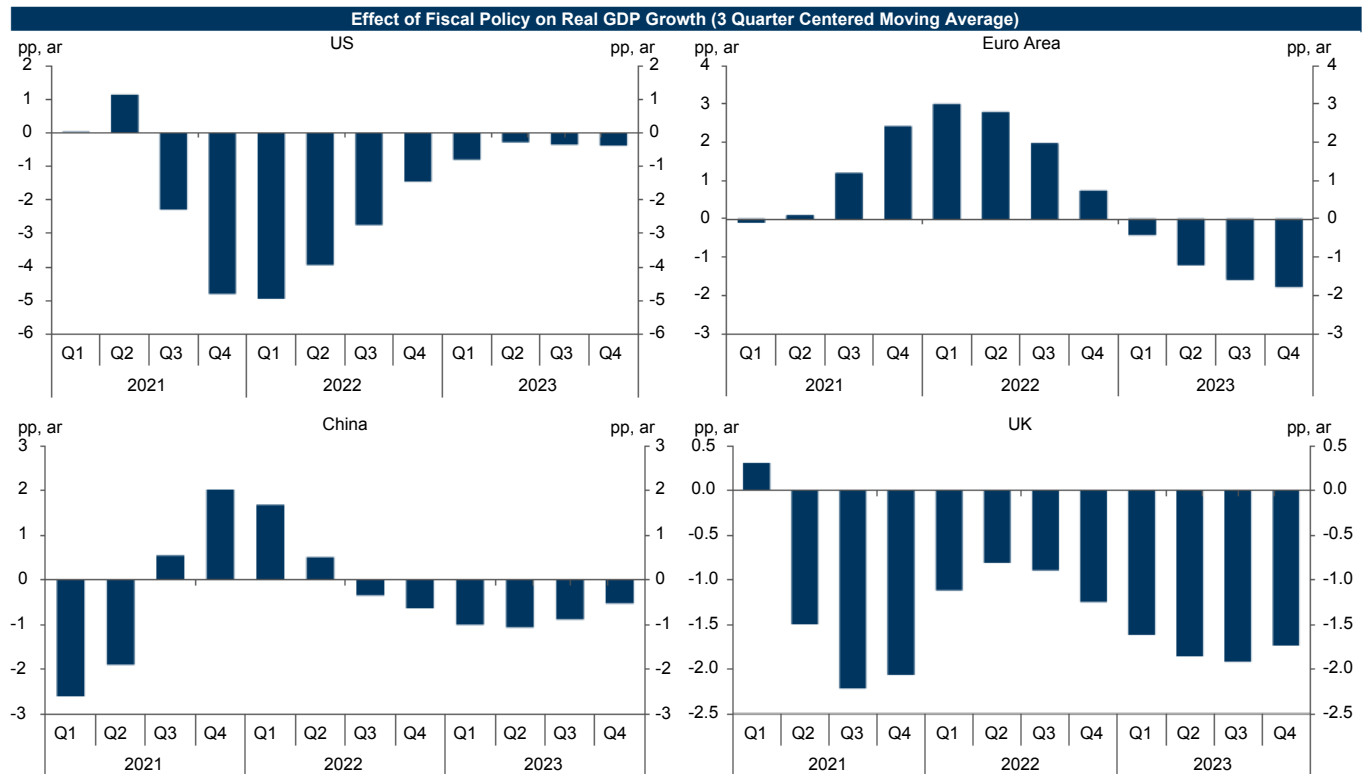
**Exhibit 26: Top-Down Fiscal Impulses Over the Next 4 Quarters (Left) and in the Euro Area, UK, and US (Right)**



We compute the 4 quarter measure using average fiscal growth impulses from 2022Q3 to 2023Q2.

Source: Goldman Sachs Global Investment Research

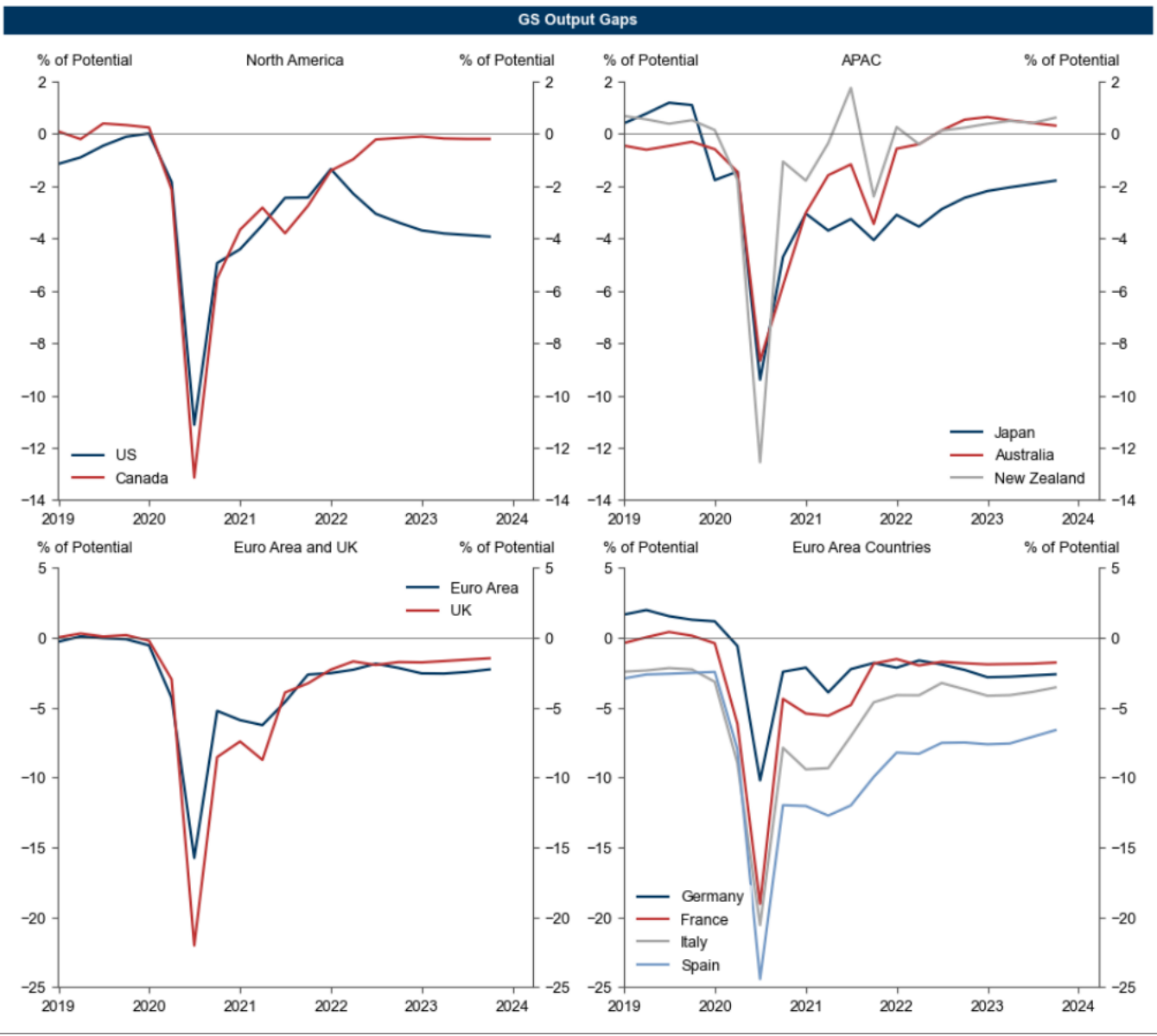
**Exhibit 27: Top Down Fiscal Impulses in the US, Euro Area, China, and UK**



Source: Goldman Sachs Global Investment Research

### Output Gaps

Exhibit 28: GS Output Gaps



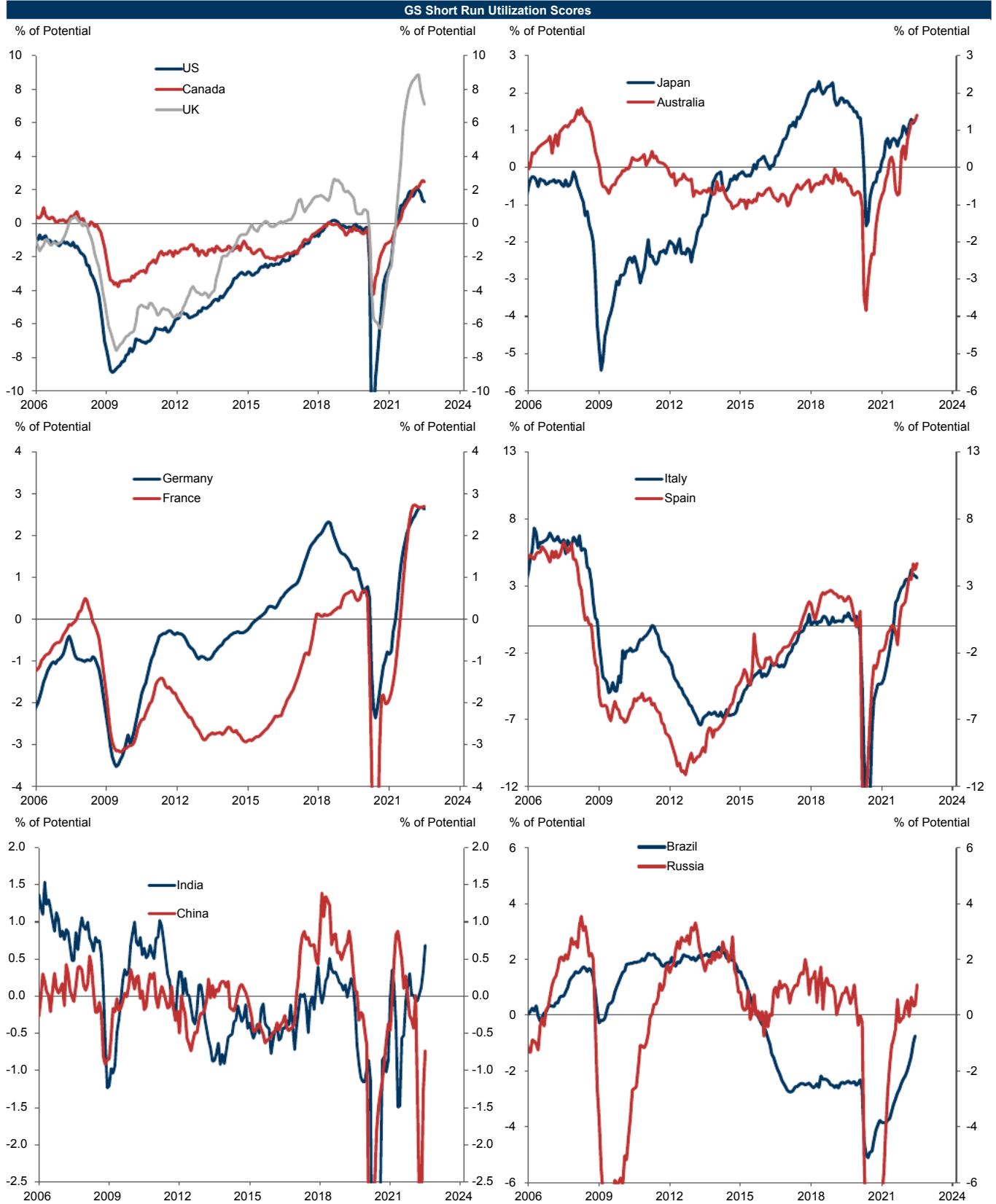
Source: Goldman Sachs Global Investment Research

Exhibit 29: Short-Run Utilization Scores

Country	Month	Spot Short-Run Utilization Scores (% of Potential)		3 Month Average (% of Potential)
		Value	Weekly Change	
US	July	+1.3	+0.1	+1.5
Germany	July	+2.6	0.0	+2.7
France	July	+2.7	+0.5	+2.7
Italy	July	+3.6	0.0	+3.7
Spain	July	+4.7	0.0	+4.5
Japan	June	+1.3	+0.1	+1.3
UK	July	+7.1	-0.6	+7.5
Canada	July	+2.5	0.0	+2.5
Australia	July	+1.4	0.0	+1.3
China	July	-0.7	+0.7	-1.6
India	July	+0.7	0.0	+0.4
Brazil	June	-0.7	+0.1	-1.1
Russia	July	+1.1	0.0	+0.6

Source: Goldman Sachs Global Investment Research

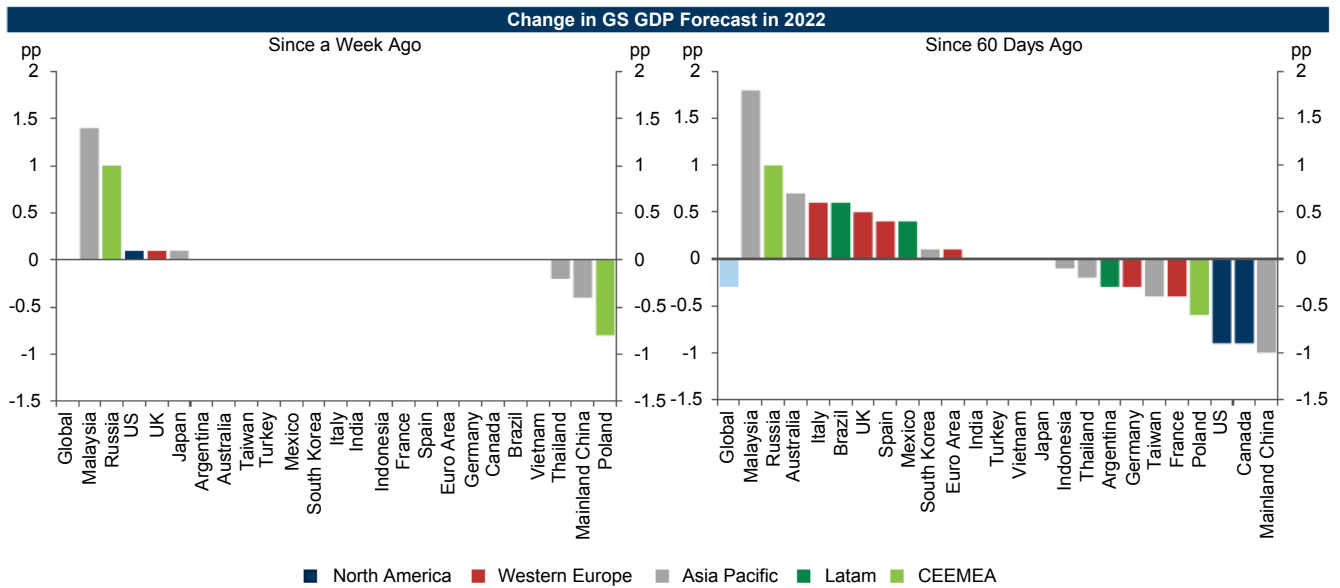
Exhibit 30: Short Run Utilization Scores



Source: Goldman Sachs Global Investment Research

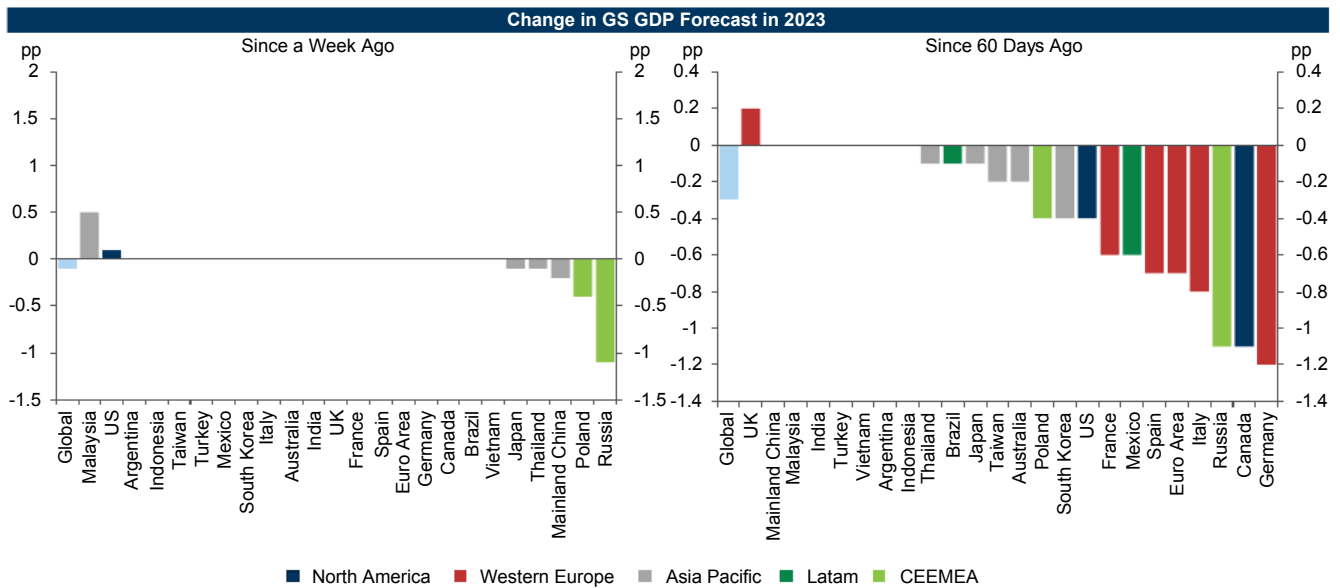
# GS Growth Forecast vs. Consensus

**Exhibit 31: Change in GS GDP Forecast in 2022**

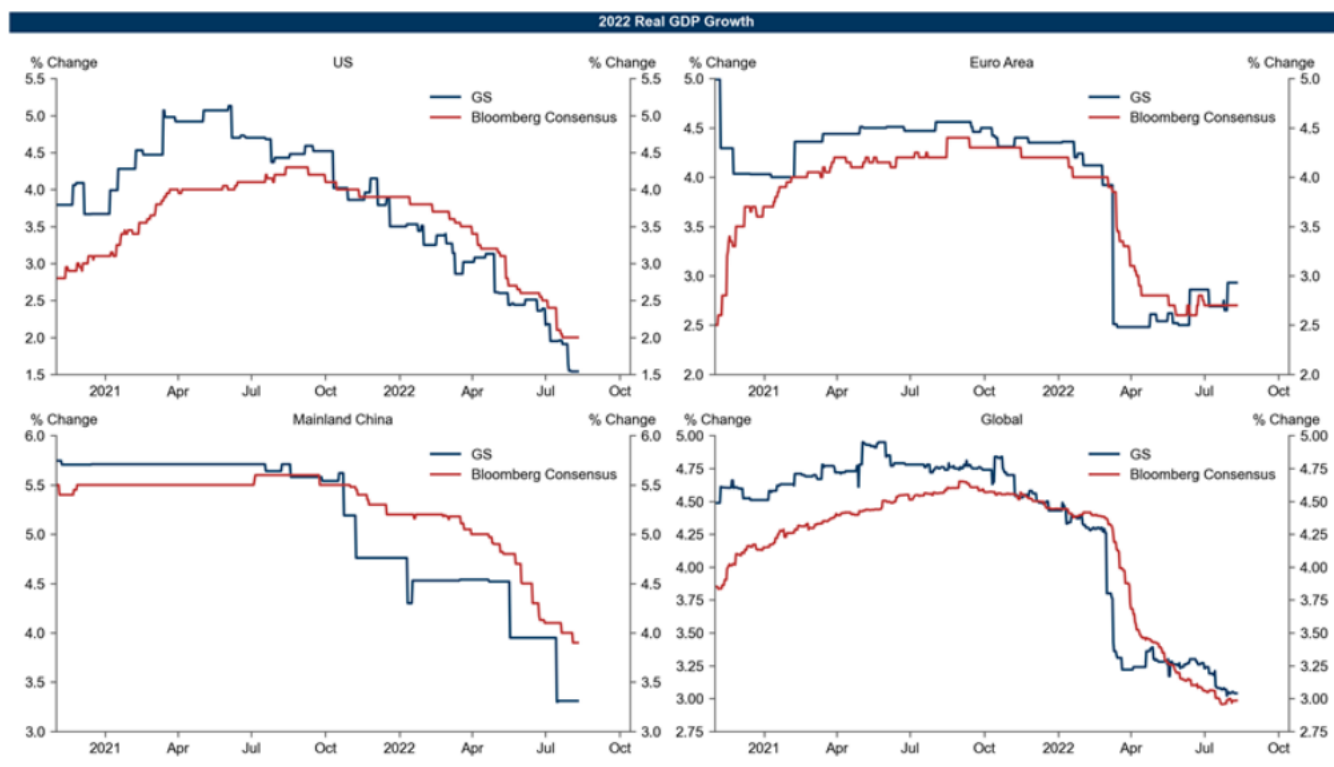


Source: Goldman Sachs Global Investment Research

**Exhibit 32: Change in GS GDP Forecast in 2023**



Source: Goldman Sachs Global Investment Research

**Exhibit 33: GS Global GDP in 2022 vs. Other Forecasters**

Source: Goldman Sachs Global Investment Research, Bloomberg

## Methodology Notes for GS Proprietary Economic Indicators

- 1. Financial Conditions:** Our Financial Conditions Indexes are designed to gauge the overall looseness or tightness of financial conditions across the world's major economies. The GSFCIs can provide valuable information about the GDP growth outlook, the transmission of monetary policy to the real economy, and the importance of financial shocks hitting the economy. (Latest methodology notes [here](#) and [here](#).)
- 2. FCI Impulses:** Our FCI impulses measure the effect of financial conditions on real GDP growth. For details on the methodology please see [here](#).
- 3. Current Activity Indicator:** In statistical jargon, the CAIs are the "first principal component" of several real activity indicators, expressed in GDP-equivalent units. The CAIs can be interpreted as the growth signal in the main high-frequency indicators for each economy. At any given point, data for certain indicators may not be available. The CAIs therefore incorporate forecasted values for missing indicators, which are then replaced with actual values when they are released. (Latest methodology note [here](#).)
- 4. MAP Surprise Index:** Our daily MAP surprise indices summarize the importance and strength (relative to consensus expectations) of economic indicators worldwide. Across numerous countries, our surprise index's methodology standardizes the criteria for indicator selection and importance, thresholds for "surprise" scores, and

schemes for aggregation, while allowing for occasional judgmental input from local economists. (Latest methodology [here](#).)

- 5. Summary and Trimmed Core Inflation.** Our summary core inflation measure consistently estimates the underlying pace of inflation across countries. It is a PCA-weighted average of our GS trimmed core, cyclical core, and persistent core inflation rates. Trimmed core trims the 1/3 most extreme price changes for the individual core components. Cyclical/persistent core overweight components that are sensitive to long-run slack/persistent. (Latest methodology note [here](#).)
- 6. Jobs-Workers Gaps:** Our jobs-workers gaps capture the difference between total labor demand (i.e. job openings plus employment) and labor supply (i.e. the labor force). We forecast the jobs-workers gap by forecasting official job openings with country-specific models reliant on high-frequency job posting data, and by forecasting the unemployment rate using jobless claims and other leading unemployment indicators. Our latest note can be found [here](#).
- 7. Wage Survey Leading Indicator:** Our wage survey leading indicators summarize survey questions about current and expected wage growth from business and consumer surveys. Our latest note can be found [here](#).
- 8. Wage Trackers:** Our wage trackers measure the underlying pace of wage growth across the G10 economies. Our latest note can be found [here](#).
- 9. Fiscal Impulses:** Our fiscal impulses measure the effect of fiscal policy on real GDP growth. For details on the methodology please see [here](#).
- 10. Output Gaps:** Our output gaps are long-run output gaps consistent with stable inflation. These output gaps are judgmental estimates from our country economists informed by several models, including our globally consistent long-run utilization scores (see below). Our output gaps are also consistent with our GDP growth forecasts and country economists' estimates of potential GDP growth, and can be found on the portal [here](#).
- 11. Short-Run Utilization Scores:** Our short-run utilization scores are based on scores for both the labor market and the industrial sector, each based on a number of hard indicators and surveys, such as, for instance, the unemployment rate or supplier delivery times. We then define the short-run utilization score as a weighted average of these scores, converted into GDP-equivalent units. Our latest note can be found [here](#). (We previously called our short-run utilization scores short-run output gaps.)

### **Yulia Zhestkova**

*Thank you to Devesh Kodnani for his contributions to this report.*



# Disclosure Appendix

## Reg AC

We, Jan Hatzius, Daan Struyven, Yulia Zhestkova and Sid Bhushan, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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