

US Economics Analyst

A Mid-Year Temperature Check on Growth (Mericle / Rindels)

- Until last week, US activity data had surprised mainly to the downside in recent months, fueling concern that the economy was slowing too quickly. But last week's retail sales and industrial production reports brought welcome relief, and we are now tracking Q2 GDP growth at 2.3%. Our estimate implies that GDP grew at a 1.9% annualized pace in 2024H1 and domestic final sales grew at a 2.3% pace, easily beating gloomy consensus expectations at the start of the year and falling only a touch short of our own initial forecast.
- What surprised in the first half of 2024? Consumer spending has been on a rollercoaster, due in part to fluctuations in disposable income and seasonal adjustment challenges, but is now on track to grow about 1.8% in 2024H1, just a few tenths below our forecast at the start of the year. Investment—including residential, business, and inventory investment—surprised to the upside, though housing slowed in Q2 after a Q1 spike driven by a dip in mortgage rates. Net exports surprised to the downside, due in part to continued weakness in goods exports, which have stagnated at levels well below the pre-pandemic trend even as imports have recovered.
- What is likely to change in the second half of 2024? We forecast 2.6% GDP growth in 2024Q3 and 2.4% in 2024Q4, for an average pace of 2.5% in 2024H2. Underpinning this is our expectation that consumer spending will continue to grow at a robust pace, supported by solid real income growth powered by a strong labor market as well as a positive wealth effect from recent increases in stock prices. Our slightly stronger growth forecast for Q3 reflects a rebound in the net trade contribution driven by softer imports and higher aircraft and other exports.
- We see a more mixed picture and more uncertainty on the investment side in the second half. We expect business investment growth to slow to a 3% pace in 2024H2 because the factory-building boom catalyzed by CHIPS Act and Inflation Reduction Act subsidies has peaked, though investment in equipment for those factories and for Al should pick up. We expect residential investment to tick down slightly in 2024H2 because the surge in apartment construction in recent years has led builders to hit the brakes on multifamily construction, and while more single-family supply is still badly needed, building permits have dipped and recent survey data point to modest further weakness in the near term as potential buyers wait for rates to fall.

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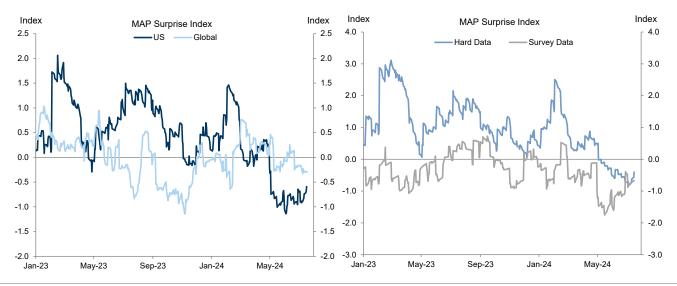
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Our forecast of a growth pick-up from 1.9% in 2024H1 to 2.5% in 2024H2 would put 2024 Q4/Q4 GDP growth at 2.2%. While our forecast remains more optimistic than the consensus forecast of 1.6%, it is roughly in line with our estimate of short-term potential GDP growth, which is currently being boosted by additional labor supply from above-trend immigration.

A Mid-Year Temperature Check on Growth

Until last week, US activity data had surprised mainly to the downside recently. Exhibit 1 shows that our US MAP surprise index has been negative for both hard data and survey data over the last couple of months. This had fueled concern that the economy was slowing too quickly until last week, when strong retail sales and industrial production reports brought welcome relief. With the latest data in hand, we are now tracking Q2 GDP growth at 2.3% (we lowered our forecast by 0.3pp over the weekend to reflect a correction by the Federal Reserve to the auto assemblies number in the June industrial production report, which it initially misreported as substantially higher).

Exhibit 1: Until Last Week, US Growth Data Had Surprised Primarily to the Downside in Recent Months, Fueling Concern That the Economy Might Be Slowing Too Quickly



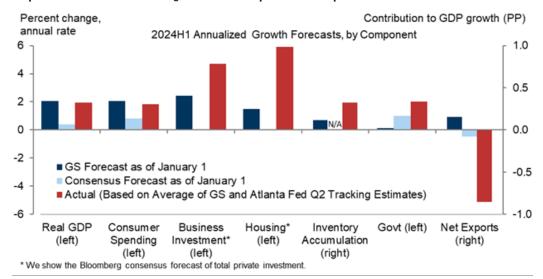
Source: Goldman Sachs Global Investment Research

What surprised in the first half of 2024?

Our Q2 tracking estimate implies that GDP grew at a 1.9% annualized pace in 2024H1 and domestic final sales grew at a 2.3% pace, easily beating gloomy consensus expectations at the start of the year and falling only a touch short of our own initial forecast. This upside surprise on growth has been accompanied by a large decline in the consensus 12-month recession probability from 50% to 30% since the start of the year (vs. our unchanged 15% estimate) as many of the growth risks that were most widely discussed in markets at the start of the year have come to look less threatening.

What surprised in the first half of 2024? Exhibit 2 compares actual outcomes for each GDP component with both our own forecast and the consensus forecast as of the start of the year.

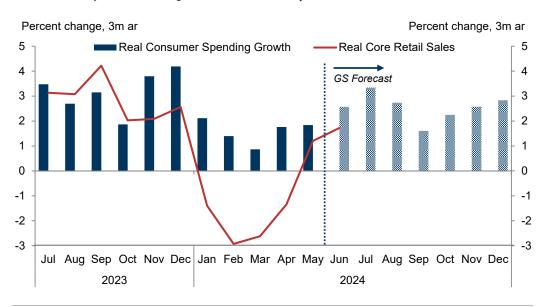
Exhibit 2: Overall GDP Growth Appears to Have Been Close to Our Expectations in 2024H1, with Upside Surprises on Investment Offsetting a Downside Surprise on Net Exports



Source: Goldman Sachs Global Investment Research, Bloomberg

While consumer spending appears to be on track to grow about 1.8% in 2024H1, just a few tenths below our initial forecast, total spending and especially core retail sales have been on a rollercoaster recently, as shown in Exhibit 3. We suspect that some of the volatility reflected monthly fluctuations in real disposable income—in particular a hit from increased tax withholding and capital gains payments at the start of the year—and from seasonal adjustment challenges, which often have an outsized impact on spending data around floating holidays such as Easter or new holidays such as Juneteenth.

Exhibit 3: Consumer Spending Was Volatile in 2024H1, Possibly Due to Fluctuations in Disposable Income and Seasonal Adjustment Challenges, But It Picked Back Up in June



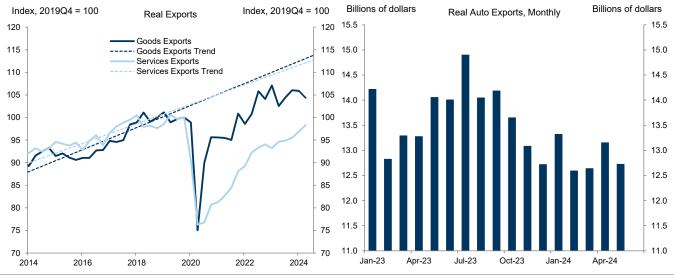
Source: Goldman Sachs Global Investment Research, Department of Commerce

The largest surprises in 2024H1 were investment spending to the upside and net exports to the downside.

All three components of investment spending—residential investment, business investment, and inventory investment—surprised meaningfully to the upside. On the residential side, activity rose at a 16% annualized pace in Q1, when a dip in mortgage rates boosted home sales, but appears to have fallen at a roughly 5% annualized pace in Q2. On the business side, structures investment growth appears to have finally turned negative in Q2 after a factory-building boom connected to CHIPS Act and Inflation Reduction Act subsidies drove 16.9% growth in 2023. But both equipment and intellectual property products investment appear to have grown at a robust 5-6% annualized pace in 2024H1, likely reflecting both solid final demand growth over the last year and fading recession fears among business leaders.

Net exports, in contrast, surprised meaningfully to the downside and will contribute, we estimate, a 1pp drag to 2024H1 GDP growth. The drag reflects both surprisingly strong imports, which grew at a roughly 7% annualized pace, and continued weakness in US goods exports, which have stagnated at levels well below the pre-pandemic trend even as imports have recovered, as shown on the left of Exhibit 4. Auto exports in particular softened, as shown on the right of Exhibit 4, possibly due to competition with the recent surge in goods exports from China and weaker growth on average in major US trading partners.

Exhibit 4: Foreign Trade Was the Weak Spot in the First Half of 2024, in Part Because Exports Continued to Stagnate at a Level Well Below the Pre-Pandemic Trend and Auto Exports in Particular Disappointed



Source: Goldman Sachs Global Investment Research, Department of Commerce

A Slightly Stronger Second Half

What is likely to change in the second half of 2024? We forecast a modest pick-up to 2.6% GDP growth in 2024Q3 and 2.4% in 2024Q4, for an average pace of 2.5% in 2024H2.

Underpinning this is our expectation that consumer spending growth will remain solid. Investors have raised many concerns about the consumer outlook over the last two years, including the exhaustion of pandemic savings, the sustainability of the low saving rate, the rise in delinquency rates, weak revenues reported by some consumer goods

companies, and the hit from higher prices, especially to low-income consumers. We argued earlier this year that these concerns are <u>less worrisome</u> than they seem.

But more simply, we think these concerns overcomplicate the outlook for aggregate consumer spending. Real income is growing at a solid pace powered by a strong labor market, and <u>household finances remain in strong shape</u> as a rising stock market pushes wealth to new historical highs. This combination, shown in Exhibit 5, proved to be a reliable formula for solid spending growth last year and should this year too, though growth will likely moderate this year as employment growth slows to a more normal pace.

Percent change 2024 Real Income Growth, Percent change Percentage points Percentage points Contribution to Q4/Q4 Basis 4.5 4.5 Annualized PCE Growth 2.5 2.5 Real Estate Decrease Total Equities Shaded income drivers 4.0 4.0 2.0 likely to have a muted effect on spending. 2.0 Increase 3.5 3.5 1.5 0% 1.5 GS 0.7% -0.6% Forecast 3.0 3.0 2.5% 1.0 1.0 0.2% 2.5 2.5 1.4% 0.5 0.5 2.0 2.0 0.0 0.0 1.5 1.5 -0.5 -0.5 1.0 1.0 0.7% -1.0 -1.00.5 0.5 0.0 0.0 -1.5 Real .Inh Interest Other Medicaid Other Total Wages Gains Income Transfers '19 2020 2021 2022 2023 2024 '25 Labor Income Transfers

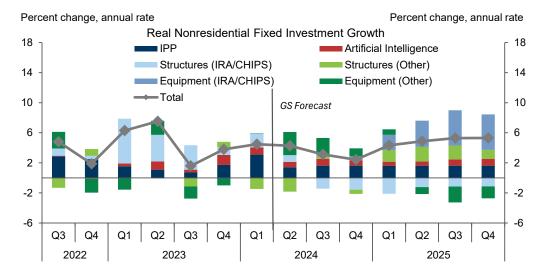
Exhibit 5: Solid Real Income Growth and a Positive Wealth Effect Should Continue to Support Consumption Growth

Source: Goldman Sachs Global Investment Research

We see a more mixed and uncertain picture on the investment side in the second half of the year.

As we noted last week, we expect <u>business investment</u> growth to slow to a roughly 3% pace in 2024H2 because the factory-building boom catalyzed by CHIPS ACT and Inflation Reduction Act subsidies—which played such a large role in business investment growth over the last year and a half, as the light blue bars in Exhibit 6 show—has now peaked. We are not too worried about this because downstream investment in equipment for those factories and artificial intelligence-related investment in computer hardware and software should eventually take its place and drive further growth, but the timing of this hand-off is somewhat uncertain. We also see some risk that uncertainty about possible changes to <u>regulatory policy</u> or <u>trade policy</u> after the upcoming elections could also delay investment in the coming months.

Exhibit 6: We Expect Investment Growth to Slow a Bit in 2024H2 Because the Factory-Building Boom Has Likely Peaked, but Investment in Equipment for Those Factories and in Al Should Eventually Take Its Place

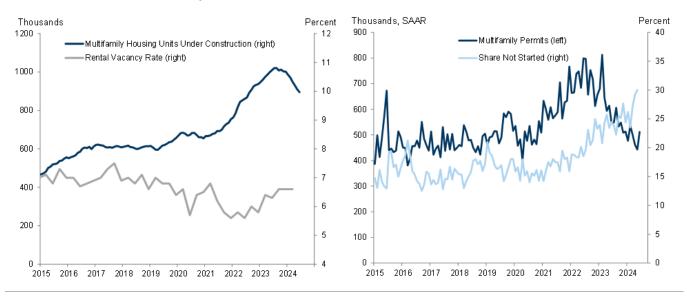


Source: Goldman Sachs Global Investment Research, Department of Commerce

We expect residential investment to tick down slightly in 2024H2, falling at a 2% annualized pace, but see more uncertainty here too. Exhibit 7 shows that the surge in apartment construction in recent years has rebalanced the rental market, which has slowed the pace of rent growth and led builders to hit the brakes on multifamily construction. Multifamily building permits have fallen sharply, and the share of permitted units that have not yet been started has risen notably.

The single-family market, in contrast, remains extremely tight, with the homeowner vacancy rate still near its historical low. But while more single-family housing is badly needed and high prices continue to provide a healthy inducement to build, recent data shown in Exhibit 8 are not encouraging for the near-term picture. Single-family building permits have fallen in recent months and are modestly below housing starts, the share of permitted units not yet started is somewhat higher than usual, mortgage applications remain low, and homebuilders have become more pessimistic about single-family sales over the next six months. As a result, while we remain broadly optimistic about the single-family outlook, the near-term picture will likely be softer.

Exhibit 7: The Surge in Apartment Construction in Recent Years Has Rebalanced the Rental Market and Softened Rent Growth, Leading Builders to Hit the Brakes on Multifamily Construction



Source: Goldman Sachs Global Investment Research, Department of Commerce

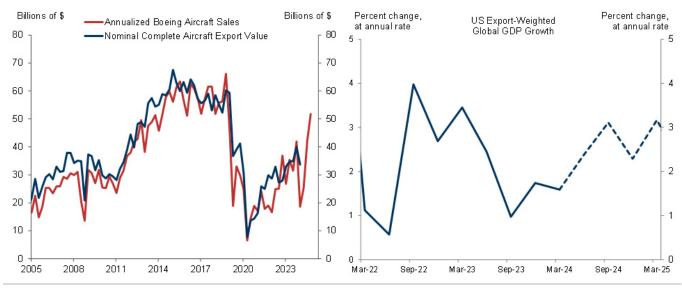
Exhibit 8: The Single-Family Part of the Housing Market Remains Historically Tight and Demand for New Construction Remains Strong, Though Recent Data Point to Some Softening as Buyers Await Lower Rates



Source: Goldman Sachs Global Investment Research, Department of Commerce, NAHB, Fannie Mae

Foreign trade is the biggest contributor to our forecasted growth pickup in the second half of the year and also accounts for the slightly stronger pace of GDP growth in Q3 than in Q4 in our forecast. One reason for this is that we expect some near-term payback for the oddly strong pace of import growth in 2024H1. Another is that we also expect a rebound in exports driven by a pickup in aircraft exports—where our equity analysts expect Boeing to resume aircraft deliveries after a regulatory review—and stronger demand growth on average in US export markets, as shown in Exhibit 9.

Exhibit 9: Net Exports Should Pick up in 2024H2 as Aircraft Exports Rebound and Demand Growth Picks Up in Key US Export Markets



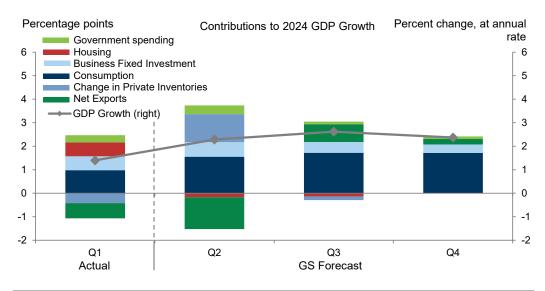
Source: Goldman Sachs Global Investment Research, Department of Commerce, Federal Reserve

Finally, we are also penciling in a deceleration in government spending in 2024H2. We expect federal spending to be roughly flat, as it likely was in the first half of the year, but we expect state and local spending to slow more meaningfully from a 3% pace in the first half to 1% in the second half because state budgets point to a spending slowdown in the new fiscal year, which began on July 1 for most states.

Above Consensus, but in Line with Short-Term Potential Growth

Exhibit 10 shows how we expect the growth contributions from each component of GDP to evolve in the remainder of the year. Our forecast of a growth pick-up from 1.9% in 2024H1 to 2.5% in 2024H2 would put 2024 Q4/Q4 GDP growth at 2.2%.

Exhibit 10: We Expect GDP Growth to Pick Up from 1.9% in 2024H1 to 2.5% in 2024H2, Implying a 2.2% 04/04 Pace That Is Above Consensus but in Line with Short-Term Potential Growth Boosted by Immigration



Source: Goldman Sachs Global Investment Research, Department of Commerce

Our forecast remains more optimistic than the consensus 2024 Q4/Q4 forecast of 1.6%. But as we have often emphasized this year, while our forecast is relatively optimistic, it is not particularly optimistic or bold in an absolute sense because it is only roughly in line with our estimate of short-term potential GDP growth, which is currently being boosted by additional labor supply from above-trend immigration.

David Mericle

Jessica Rindels

The US Economic and Financial Outlook

THE US ECONOMIC AND FINANCIAL OUTLOOK

	2022	2023	2024	2025	2026	2027	2023				2024			
		(f)	(f)	(f)	(f)	(f)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
OUTPUT AND SPENDING											1			
Real GDP	1.9	2.5	2.6	2.2	2.0	2.0	2.2	2.1	4.9	3.4	1.4	2.3	2.6	2.4
Real GDP (annual=Q4/Q4, quarterly=yoy)	0.7	3.1	2.2	2.2	1.9	2.0	1.7	2.4	2.9	3.1	2.9	3.0	2.4	2.2
Consumer Expenditures	2.5	2.2	2.3	2.3	2.0	2.0	3.8	0.8	3.1	3.3	1.5	2.3	2.5	2.5
Residential Fixed Investment	-9.0	-10.6	3.5	0.4	2.8	2.4	-5.3	-2.2	6.7	2.8	16.0	-4.8	-4.0	0.0
Business Fixed Investment	5.2	4.5	3.8	4.1	4.3	3.6	5.7	7.4	1.5	3.8	4.4	4.3	3.1	2.4
Structures	-2.1	13.2	3.5	-1.0	2.9	3.0	30.3	16.1	11.2	10.9	3.4	-2.9	-4.0	-7.0
Equipment	5.2	-0.3	3.2	7.4	5.1	3.2	-4.1	7.7	-4.4	-1.1	1.6	9.9	6.8	6.8
Intellectual Property Products	9.1	4.5	4.5	4.0	4.3	4.5	3.8	2.7	1.8	4.3	7.7	3.5	4.0	4.0
Federal Government	-2.8	4.2	1.4	0.0	0.0	0.0	5.2	1.1	7.1	2.4	-0.2	0.5	0.0	0.0
State & Local Government	0.2	4.0	3.5	1.1	1.0	1.0	4.6	4.7	5.0	6.0	3.0	3.1	1.0	1.0
Net Exports (\$bn, '17)	-1,051	-928	-993	-1,010	-1,034	-1,027	-935	-928	-931	-919	-960	-1,037	-994	-981
Inventory Investment (\$bn, '17)	128	44	75	80	60	60	27	15	78	55	29	96	87	87
Nominal GDP	9.1	6.3	5.1	4.3	3.9	4.1	6.3	3.8	8.3	5.1	4.5	5.0	4.6	4.2
Industrial Production, Mfg.	2.7	-0.5	0.6	3.7	3.5	3.3	0.3	0.0	-0.5	-1.5	-1.2	3.3	3.5	3.7
HOUSING MARKET							1				1			
Housing Starts (units, thous)	1.552	1,421	1.384	1.453	1.529	1,545	1,369	1.455	1,380	1.481	1,407	1.382	1.369	1,377
New Home Sales (units, thous)	637	666	687	768	776	810	636	698	682	646	664	662	692	730
Existing Home Sales (units, thous)	5.087	4,101	4,084	4,237	4,290	4,546	4,317	4.187	4,020	3.880	4.200	4.055	3.997	4.084
Case-Shiller Home Prices (%yoy)*	7.5	5.1	3.8	4.4	4.9	4.9	2.3	-0.2	2.5	5.1	6.4	5.8	4.3	3.8
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INFLATION (% ch, yr/yr)	6.4	3.3	2.9	2.5	2.2	2.2		4.0	3.6	3.2	3.2	3.2	2.9	2.9
Consumer Price Index (CPI)** Core CPI **	5.7	3.9	3.1	2.5	2.2	2.2	5.7 5.5	4.0 5.2	4.4		3.8	3.4	3.3	3.1
Core PCE** †	4.9	2.9	2.6	2.1	2.3	2.3	4.8	4.6	3.8	4.0 3.2	2.9	3.4 2.7	2.6	2.6
Cole PCE	4.9	2.9	2.0	2.1	2.0	2.0	4.0	4.0	3.0	3.2	2.9	2.7	2.0	2.0
LABOR MARKET														
Unemployment Rate (%)^	3.5	3.7	4.0	3.9	3.8	3.8	3.5	3.6	3.8	3.7	3.8	4.1	4.0	4.0
U6 Underemployment Rate (%)^	6.5	7.1	7.2	7.1	7.0	7.0	6.7	6.9	7.0	7.1	7.3	7.4	7.2	7.2
Payrolls (thous, monthly rate)	377	251	199	100	75	75	305	274	213	212	267	177	175	175
Employment-Population Ratio (%)^	60.1	60.1	60.1	59.9	59.8	59.6	60.4	60.3	60.4	60.1	60.3	60.1	60.1	60.1
Labor Force Participation Rate (%)^	62.3	62.5	62.5	62.3	62.1	61.9	62.6	62.6	62.8	62.5	62.7	62.6	62.6	62.5
Average Hourly Earnings (%yoy)	5.4	4.5	3.9	3.4	3.2	3.2	4.6	4.6	4.5	4.3	4.2	3.9	3.7	3.7
GOVERNMENT FINANCE							l				l			
Federal Budget (FY, \$bn)	-1,376	-1,694	-1,900	-2,000	-2,050	-2,150								
FINANCIAL INDICATORS											ı			
FF Target Range (Bottom-Top, %)^	4.25-4.5	5.25-5.5	4.75-5	3.75-4	3.25-3.5	3.25-3.5	4.75-5	5-5.25	5.25-5.5	5.25-5.5	5.25-5 5	5.25-5.5	5-5.25	4.75-5
10-Year Treasury Note^	3.88	3.88	4.25	4.10	4.10	4.10	3.48	3.81	4.59	3.88	4.20	4.36	4.25	4.25
Euro (€/\$)^	1.07	1.11	1.05	1.15	1.15	1.15	1.09	1.09	1.06	1.11	1.08	1.07	1.07	1.05
Yen (\$/¥)^	132	141	154	130	125	120	133	144	149	141	151	161	158	154
1011(4/1)	102	171	104	,50	120	120	1 100		1-13	171	1 131	101	700	104

^{*} Weighted average of metro-level HPIs for 381 metro cities where the weights are dollar values of housing stock reported in the American Community Survey. Annual numbers are Q4/Q4.

** Annual inflation numbers are December year-on-year values. Quarterly values are Q4/Q4.

† PCE = Personal consumption expenditures. ^ Denotes end of period.

Note: Published figures in bold.

Source: Goldman Sachs Global Investment Research

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Disclosure Appendix

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We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Ronnie Walker, Manuel Abecasis, Tim Krupa, Elsie Peng and Jessica Rindels, 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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