

## US Economics Analyst

## Anatomy of a Boom (Hill)

- The post-vaccine reopening of the economy is barely underway, but our expectation of accelerating sequential growth is transitioning from forecast to fact. Credit card data are consistent with a mid-single-digit gain in March retail sales (control, mom sa), and we believe the risks are skewed to the upside, because the final two weeks of the month are benefitting from \$240 billion of stimulus payments the week of March 17. All in, we estimate the pace of coronavirus fiscal support to consumers is accelerating by \$1 trillion on an annualized basis (or 5% of GDP) for March and Q2, relative to the previous six months.
- The intra-month spending pattern also indicates a stimulus- and reopening-driven spending surge. Our Recovery Tracker inflected higher over the course of March, in part due to retailer reopenings, the reversal of winter storm effects, and a decline in new Covid infections that coincided with a 15pp increase in airport usage. Restaurant activity has similarly improved, with OpenTable seatings nearing 70% of normal nationwide and back above pre-crisis in Texas.
- Looking ahead, we believe the uneven recovery to date across economic sectors is actually good news for the 2021 growth outlook, as it increases the scope for outsized gains in underperforming sectors. The message from business surveys is also quite encouraging, with US PMIs picking up to elevated levels over the last two months. Even more striking, the US PMI data have outperformed all 25 “sudden stop” episodes in our international sample, even the 4 “V-shaped recoveries” that saw GDP return to the pre-crisis peak within a year.
- We are adjusting our real consumption growth forecasts to +9.5% in Q1, +12.5% in Q2, and +7.0% in Q3 (qoq ar, vs. +8.5%, +10.0%, and +10.0% previously). While we are leaving our Q1 GDP forecast unchanged at +7.5% due to the winter storm drag, we are also boosting our Q2 GDP forecast by 1.0pp to +10.5%. Offsetting this, we are lowering our Q3 GDP forecast by 1.0pp to 7.5%, because faster spring growth reduces scope for reopening-related gains in the fall. This small pull-forward leaves our growth forecast for 2021 unchanged at 8.0% on a Q4/Q4 basis and raises it one-tenth to 7.2% on a full-year basis.

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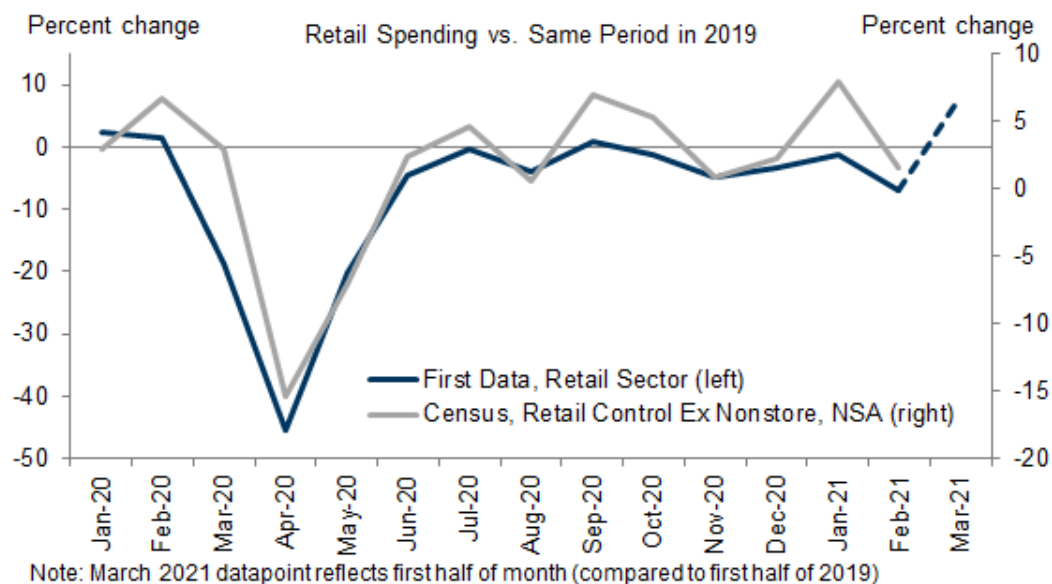
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## Anatomy of a Boom

The post-vaccine reopening of the economy is barely underway, but our expectation of accelerating sequential growth is transitioning from forecast to fact. As shown in Exhibit 1, the sequential change in First Data retail credit card spending during the first half of March is consistent with a Census retail sales rebound of as much as 5.5% (retail control, mom sa).<sup>1</sup>

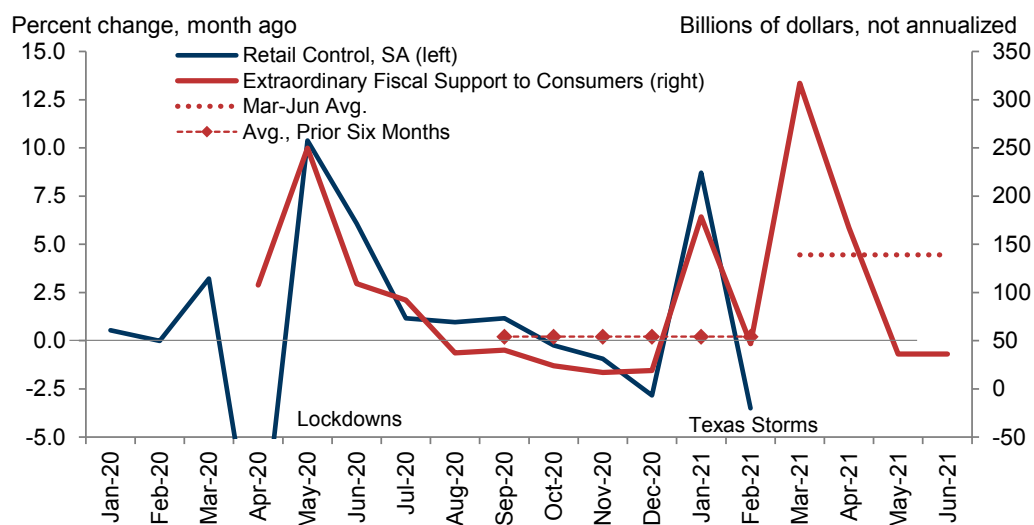
**Exhibit 1: Consumer Spending Had Picked Up Sharply Even Before the Stimulus Checks Arrived**



Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research

But importantly, this observed rebound *pre-dated* the arrival of the stimulus checks legislated by the [American Rescue Plan Act](#) (ARP). As shown in Exhibit 2, discretionary spending since the April 2020 lockdowns has closely tracked the cadence of fiscal support programs to consumers (stimulus payments and newly created unemployment programs). Accordingly, the step up from \$650bn annualized over the last six months to our estimate of a \$1.65tn annualized run-rate during March and Q2 is set to drive consumer spending even higher.

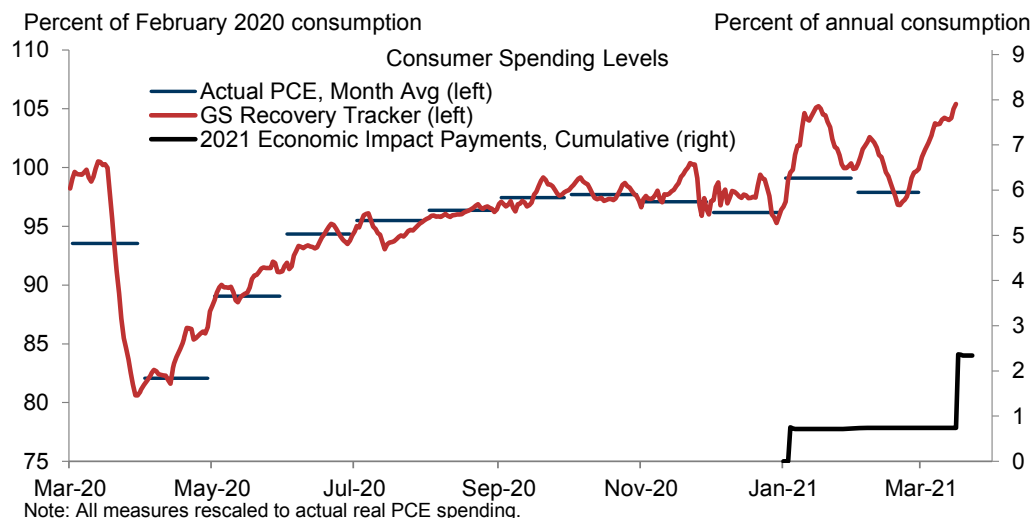
<sup>1</sup> Adjusted to reflect the lower volatility of the Census measure. The Census measure has risen at a firmer clip since the fall, but convergence of the two measures would still require a very strong gain of ~2.5% for March retail control (mom sa).

**Exhibit 2: Discretionary Spending During the Crisis Has Closely Tracked Fiscal Support to Consumers**

Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research

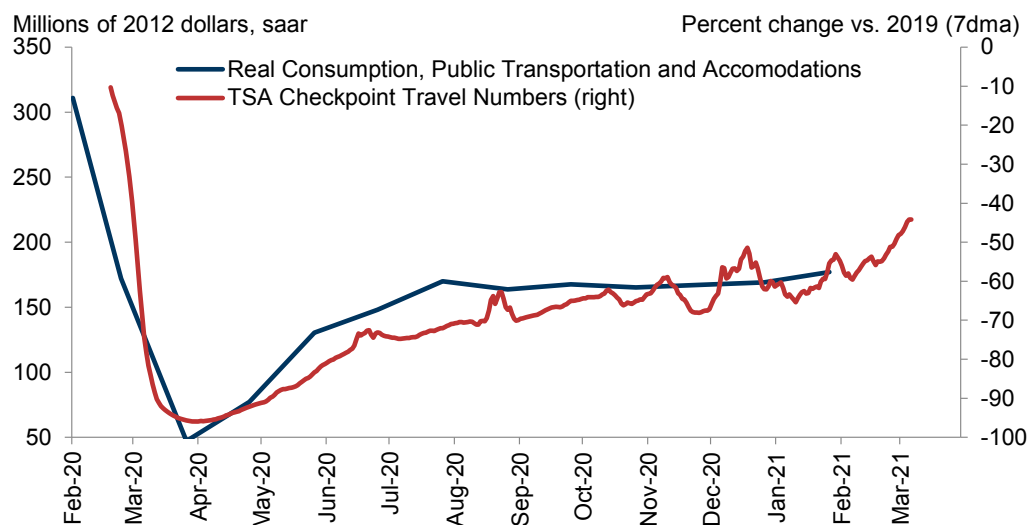
Even if consumers save four-fifths of these transfers between now and the end of Q2, this stimulus would drive incremental spending of \$200 billion annualized in that window—boosting average GDP levels by 1%. This alone would contribute 2 percentage points of annualized GDP growth in the first half of the year.

The intramonth spending pattern also indicates a stimulus and reopening windfall. As shown in Exhibit 3, our consumer spending recovery tracker has inflected higher over the course of March. We believe the early-month rebound reflected the combination of retailer reopenings and the reversal of winter storm effects. And as shown by the black line of the same exhibit, nearly all of the consumption step-up predated the ARP stimulus arrival (our tracker is a 7-day average).

**Exhibit 3: Spending Has Improved Over the Course of the Month; ARP Stimulus to Bolster Spending in the Second Half of March and Q2**


Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research

The nowcasting information set also indicates a pickup in services spending. As shown in Exhibit 4, the acceleration in vaccinations and the related decline in new Covid infections coincided with a 15pp improvement in airport usage (relative to the 2019 pace).

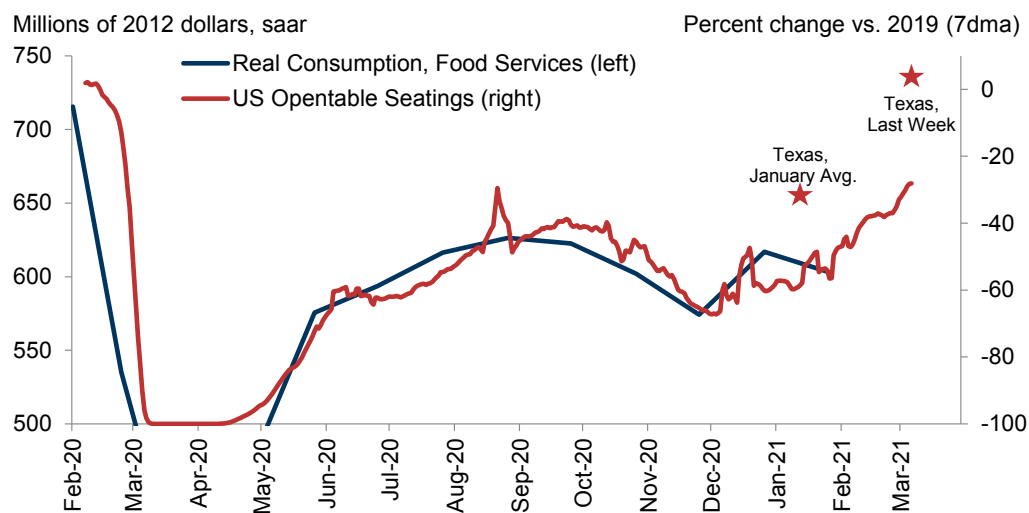
**Exhibit 4: Virus-Sensitive Services Also Firming Notably**


Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research, Department of Homeland Security

Restaurant activity has similarly improved, with utilization approaching 70% of normal (see Exhibit 5). And in Texas—where restrictions have been eased relatively quickly—dining activity is now back above pre-crisis norms. While this may increase public health risks in coming months, it also suggests scope for a more rapid normalization in

business activity in the interim.

#### Exhibit 5: Dining Activity Picking Up Sharply—and Back to Normal in Texas

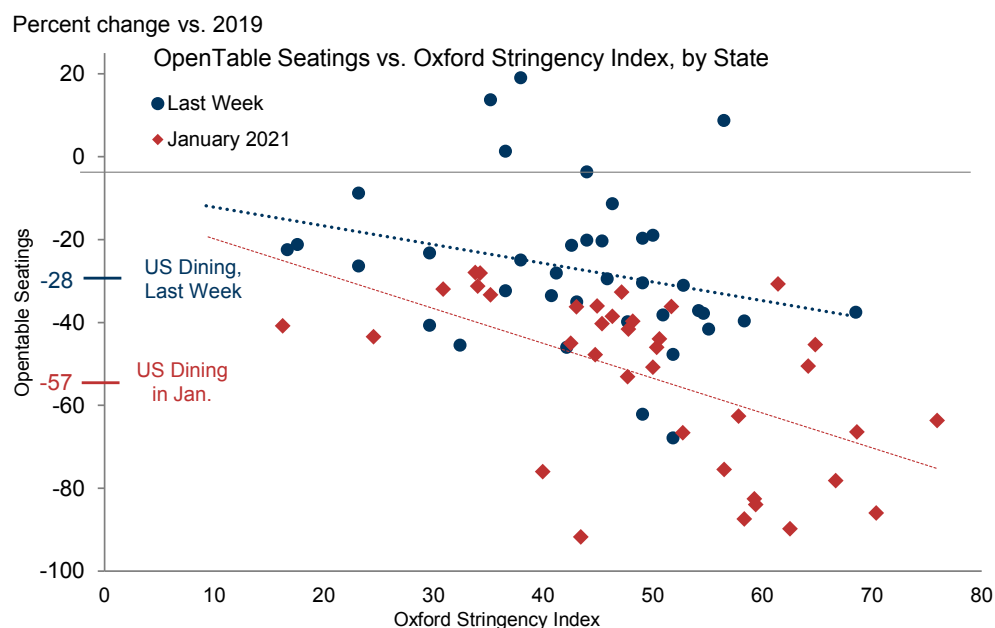


Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research, OpenTable

Based on the historical relationships between the TSA and OpenTable datasets with official consumption data (blue lines in the previous two exhibits), we estimate these datasets indicate a 1.6pp direct boost to overall service-sector sequential growth in March or in April (we assume this improvement is split between the two months).

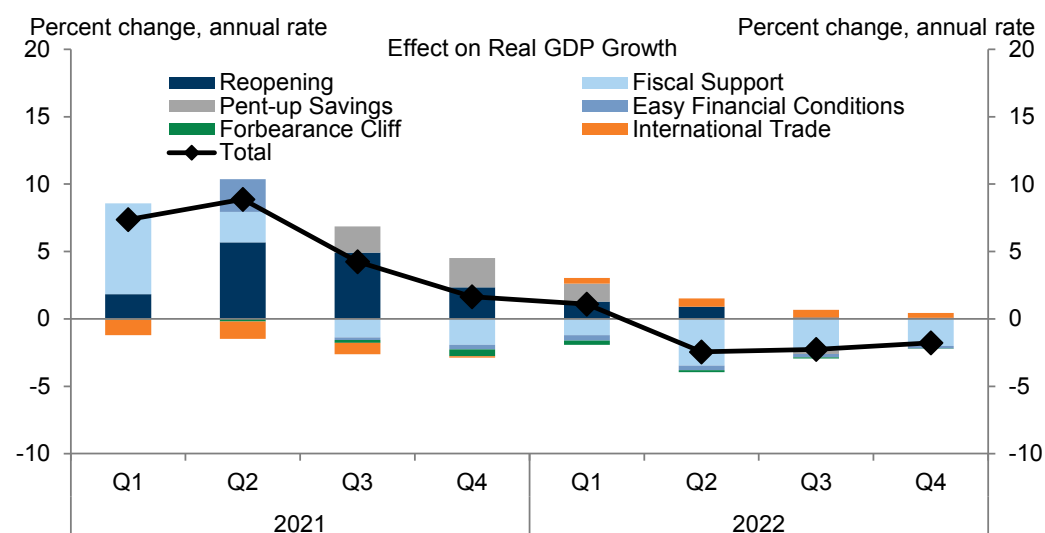
#### Shut and Open

Looking ahead, the state-level cross section indicates scope for further gains in virus-sensitive services activity—to the extent the public health situation allows. As shown in Exhibit 6, the Oxford Stringency Index explained much of the cross-state variation in dining activity in January. This bodes well for consumer services consumption in Q2 and beyond, given the current trajectory of vaccinations and new infections and its implications for public health policy (see [here](#) and [here](#)).

**Exhibit 6: Severity of Business Restrictions Unsurprisingly Correlated with Dining Downturn**

Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research, OpenTable, Oxford University

Exhibit 7 shows our updated analysis of the combined growth impulses affecting the economy. While we now expect a larger boost from fiscal stimulus and reopening in the first half of the year, our forecast narrative remains broadly unchanged: stimulus-driven growth early in 2021, reopening-driven growth starting in the spring, and a growth surge in coming months as both tailwinds co-align.

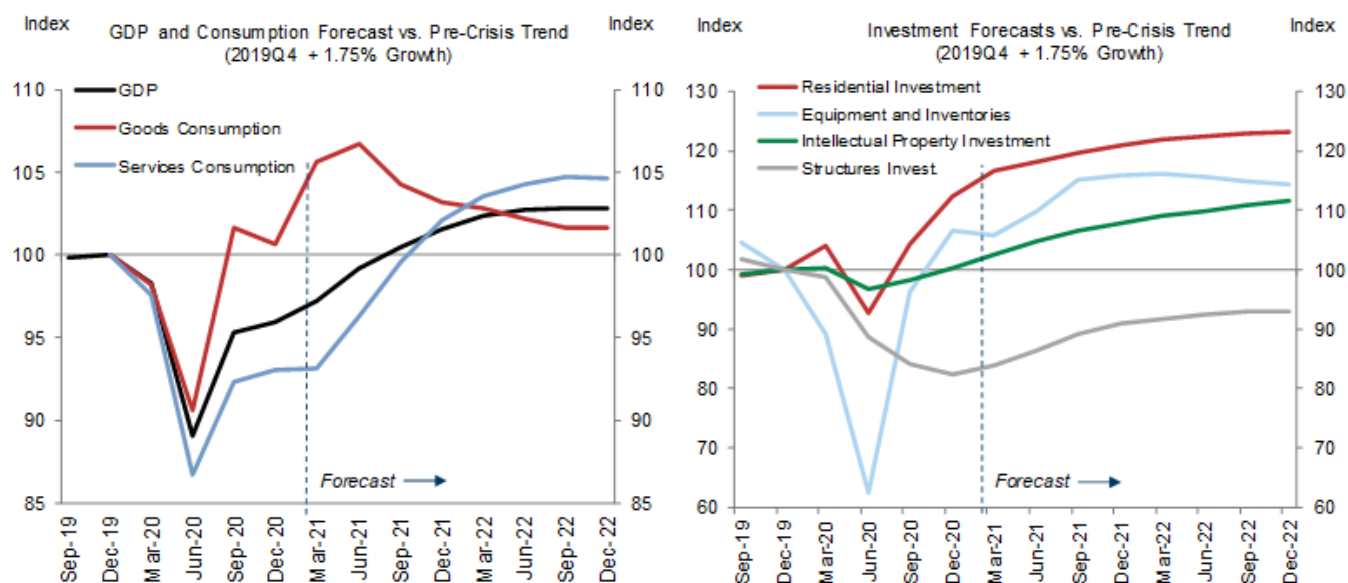
**Exhibit 7: Growth Impulses to Raise GDP by Further 6% in 2021, With Frontloaded Boost to in First Half**

Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research

## Anatomy of a Boom

The recovery across economic sectors has been uneven thus far. As shown in Exhibit 8, BEA data already indicate a full recovery in the goods sector relative to the pre-crisis trend, led by consumer merchandise (goods consumption), residential investment, and to a lesser extent, equipment investment.

**Exhibit 8: Services Consumption Still Depressed by 5% (and Represents 45% of GDP)**



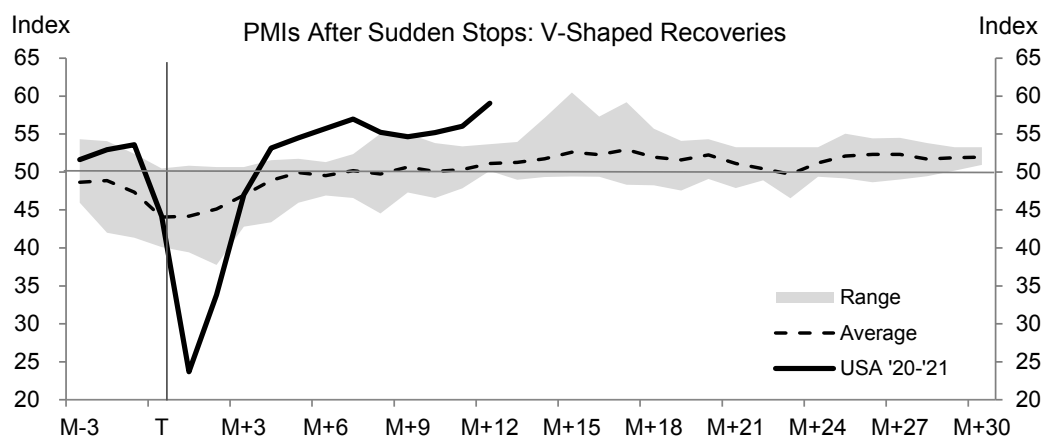
Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research

The most notable laggard is consumer services—due to the pandemic. Structures investment also remains depressed.<sup>2</sup> Net trade and government spending also remain low relative to the pre-crisis trend, reflecting school closures, tight state and local budgets, and relatively weaker foreign demand.

But because we do not observe or expect a sustained overheating in the goods sector, we believe the limited breadth of the recovery is actually good news for the 2021 growth outlook, as it increases the scope for outsized gains in underperforming sectors.

Returning to the goods sector, it may be too soon to tell whether the ARP stimulus and the reopening of the economy will catalyze a further acceleration in business investment and inventory accumulation. But so far the message from business surveys is quite encouraging. As shown in Exhibit 9, US PMI data picked back up to escalated levels in the last two months. And even more striking, when we compare against historical “sudden stops,” the US PMI data over the last year have outperformed *all* 25 episodes in our international sample. That includes the 4 “V-shaped recoveries” in the dataset, all of which saw GDP returning near or above pre-crisis peaks within a year.

<sup>2</sup> While we expect the commercial construction rebound in the energy and industrial sector to continue, headwinds in office and retail real estate could prove more long-lasting, due to the advent of Work-from-Home and ecommerce.

**Exhibit 9: US PMIs Outperforming All 25 Sudden-Stop Episodes in Our Dataset, Consistent with Return to Economic Normalcy in Q2**


Note: PMIs reflect average of key components (new orders, employment, and production activity) if available, otherwise uses headline measure. Includes both manufacturing and services. Classification criteria are: V-shaped recoveries (activity returns to within 0.5% of the previous peak within a year). Includes Japan (2011), Japan (2014), South Korea (2008), and Turkey (2018).

Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research

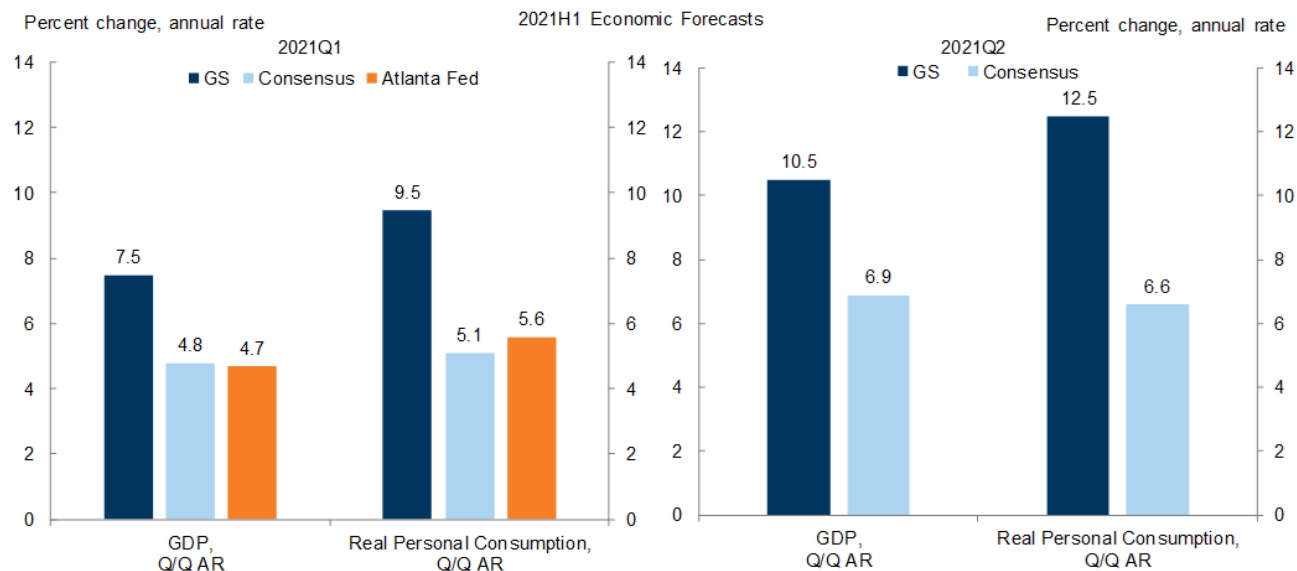
Based on these historical precedents, the US PMI data are consistent with a very strong first half of 2021 that returns US economic activity to normal at some point during the spring.

### H1 Forecast Upgrade

We are pulling forward the timing of our forecasted GDP and consumption rebound modestly. We now forecast quarterly real consumption growth of +9.5% in Q1, +12.5% in Q2, and +7.0% in Q3 (qoq ar, vs. +8.5%, +10%, and +10% previously). We are leaving our Q1 GDP forecast unchanged at +7.5% due to a larger-than-expected winter storm drag on housing and industrial output in February, but we are also boosting our Q2 GDP forecast by 1.0pp to +10.5%. Because faster growth in the spring implies less of a boost from reopening and savings drawdown later this year, we are lowering our Q3 GDP forecast by the same amount (-1.0pp to +7.5%).

As summarized in Exhibit 10, our +9.0% annualized GDP growth forecast for the first half of the year assumes a sharp rebound in March retail sales (released April 15): we assume +6.0% retail control (mom sa). Both the stimulus and the reopening ramped up over the course of March, which implies the strong nowcasting data we are currently receiving will not be fully reflected in the official data until the April reports. Accordingly, we are penciling in an additional 1% rise in April retail sales (control, mom sa), followed by sequential declines over the remainder of the quarter.



**Exhibit 10: A Sharper Consumption Rebound Drives Our Above-Consensus GDP Forecast**

Source: Department of Labor, Department of Commerce, Bloomberg, Haver Analytics, Federal Reserve System, Goldman Sachs Global Investment Research

While the ARP will also benefit services spending, we continue to expect the timing of the services rebound to depend on the public health situation and the related pace of reopening. Based on the improvement in travel and restaurant activity so far in March (as discussed in Exhibits 4 and 5 above)—coupled with their read-through to recreation and personal services—we are assuming +1.7% nominal PCE services spending in that month (mom sa). Coupled with our retail control and inflation assumptions, we project total real consumption growth of +2.8% in March (mom sa). While large, we note that such a gain would be less than half the pace achieved last May (+8.5%) or last June (+5.9%), and it would also be slightly lower than the January 2021 outturn (+3.0%).

**Spencer Hill**

# The US Economic and Financial Outlook

## Forecast Changes

We are adjusting our real consumption growth forecasts to +9.5% in Q1, +12.5% in Q2, and +7.0% in Q3 (qoq ar, vs. +8.5%, +10.0%, and +10.0% previously). While we are leaving our Q1 GDP forecast unchanged at +7.5% due to the winter storm drag, we are also boosting our Q2 GDP forecast by 1.0pp to +10.5%. Offsetting this, we are lowering our Q3 GDP forecast by 1.0pp to 7.5%, because faster spring growth reduces scope for reopening-related gains in the fall. This small pull-forward leaves our growth forecast for 2021 unchanged at 8.0% on a Q4/Q4 basis and raises it one-tenth to 7.2% on a full-year basis.

(% change on previous period, annualized, except where noted)

	2019	2020	2021 (f)	2022 (f)	2023 (f)	2024 (f)	Q1	2021 Q2	Q3	Q4	Q1	2022 Q2	Q3	Q4
<b>OUTPUT AND SPENDING</b>														
Real GDP	2.2	-3.5	7.2	4.9	1.8	2.1	7.5	10.5	7.5	6.5	5.0	3.0	2.0	1.5
Real GDP (annual=Q4/Q4, quarterly=yoy)	2.3	-2.4	8.0	2.9	1.9	2.1	0.7	13.4	7.4	8.0	7.4	5.5	4.1	2.9
Consumer Expenditures	2.4	-3.9	8.2	5.1	1.8	2.1	9.5	12.5	7.0	7.0	5.0	3.0	2.0	1.5
Residential Fixed Investment	-1.7	6.1	17.0	5.0	2.6	2.0	18.7	7.0	7.0	6.0	5.0	4.0	3.0	3.0
Business Fixed Investment	2.9	-4.0	9.3	5.6	3.6	3.7	10.3	11.3	9.7	6.7	4.3	3.9	3.7	3.4
Structures	-0.6	-11.0	0.8	7.4	2.8	2.5	9.1	15.0	15.0	10.0	5.0	5.0	4.0	2.5
Equipment	2.1	-5.0	14.2	4.1	2.5	2.5	10.2	10.0	8.0	5.0	2.5	2.5	2.5	2.5
Intellectual Property Products	6.4	1.7	8.5	6.5	5.3	5.5	11.0	11.0	9.0	7.0	6.0	5.0	5.0	5.0
Federal Government	4.0	4.3	0.9	0.1	0.0	0.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
State & Local Government	1.3	-0.8	0.8	3.4	0.6	0.5	2.8	2.0	3.0	5.0	6.0	2.0	0.5	0.5
Net Exports (\$bn, '12)	-918	-926	-1,240	-1,253	-1,215	-1,198	-1177	-1227	-1268	-1289	-1283	-1258	-1238	-1235
Inventory Investment (\$bn, '12)	49	-77	69	85	60	60	26	50	100	100	100	90	80	70
Industrial Production, Mfg.	-0.2	-6.5	9.1	5.4	2.0	2.0	7.2	9.8	8.3	6.8	5.5	3.7	2.6	1.4
<b>HOUSING MARKET</b>														
Housing Starts (units, thous)	1,295	1,395	1,440	1,519	--	--	1,398	1,370	1,502	1,492	1,482	1,509	1,538	1,545
New Home Sales (units, thous)	685	823	754	803	795	795	777	718	749	774	803	815	800	795
Existing Home Sales (units, thous)	5,327	5,658	6,726	6,841	6,958	7,076	6,685	6,712	6,740	6,768	6,797	6,827	6,856	6,885
Case-Shiller Home Prices (%yoy)*	3.4	10.4	4.7	4.6	3.8	--	7.9	8.5	6.4	4.7	4.7	4.7	4.8	4.6
<b>INFLATION (% ch, yr/yr)</b>														
Consumer Price Index (CPI)**	2.3	1.3	2.5	2.0	2.3	2.4	1.8	3.4	2.7	2.6	2.2	1.9	1.9	2.0
Core CPI **	2.2	1.6	2.1	2.3	2.4	2.5	1.4	2.2	1.8	1.9	2.3	2.4	2.4	2.3
Core PCE** †	1.6	1.4	1.95	2.00	2.10	2.20	1.5	2.2	1.8	2.0	1.9	1.9	2.0	2.0
<b>LABOR MARKET</b>														
Unemployment Rate (%)^	3.6	6.7	4.0	3.5	3.2	3.1	6.2	5.4	4.5	4.0	3.7	3.6	3.5	3.5
U6 Underemployment Rate (%)^	6.8	11.7	8.1	7.2	6.6	6.4	10.8	9.7	8.7	8.1	7.6	7.4	7.2	7.2
Payrolls (thous, monthly rate)	168	-785	586	242	138	105	332	733	750	528	350	233	200	185
<b>GOVERNMENT FINANCE</b>														
Federal Budget (FY, \$bn)	-984	-3,132	-3,400	-2,200	-1,450	-1,400	--	--	--	--	--	--	--	--
<b>FINANCIAL INDICATORS</b>														
FF Target Range (Bottom-Top, %)^	1.5-1.75	0-0.25	0-0.25	0-0.25	0-0.25	0.5-0.75	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25
10-Year Treasury Note^	1.92	0.93	1.90	2.10	2.30	2.40	1.50	1.80	1.90	1.90	1.95	2.00	2.05	2.10
Euro (€/€)^	1.12	1.22	1.28	1.30	1.30	1.30	1.18	1.21	1.27	1.28	1.28	1.29	1.29	1.30
Yen (\$/¥)^	109	103	105	100	99	99	109	108	106	105	103	102	101	100

\* 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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## Economic Releases

Date	Time (ET)	Indicator	Estimate		
			GS	Consensus	Last Report
<b>Mon</b>	<b>Mar 29</b>	10:30 Dallas Fed Manufacturing Index (March)	n.a.	14.5	17.2
<b>Tue</b>	<b>Mar 30</b>	9:00 FHFA House Price Index (January)	n.a.	+1.3%	+1.1%
		9:00 S&P/Case-Shiller Home Price Index (January)	+1.3%	+1.20%	+1.25%
		10:00 Consumer Confidence (March)	97.5	96.1	91.3
<b>Wed</b>	<b>Mar 31</b>	8:15 ADP Employment (March)	+575k	+550k	+117k
		10:00 Pending Home Sales (February)	-5.0%	-2.9%	-2.8%
<b>Thu</b>	<b>Apr 01</b>	8:30 Initial Jobless Claims	690k	680k	684k
		8:30 Continuing Claims	n.a.	3,775k	3,870k
		10:00 Construction Spending (February)	-0.5%	-1.0%	+1.7%
		10:00 ISM Manufacturing (March)	62.0	61.4	60.8
		17:00 Lightweight Motor Vehicle Sales (March)	16.5M	16.4M	15.7M
<b>Fri</b>	<b>Apr 02</b>	8:30 Nonfarm Payrolls (March)	+775k	+643k	+379k
		8:30 Private Payrolls (March)	+750k	+635k	+465k
		8:30 Unemployment Rate (March)	5.9%	6.0%	6.2%
		8:30 Average Hourly Earnings (March)	+0.1%	+0.1%	+0.2%
		8:30 Labor Force Participation Rate (March)	n.a.	61.5%	61.4%

Source: Goldman Sachs Global Investment Research

# Disclosure Appendix

## Reg AC

We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Daan Struyven, Joseph Briggs, Blake Taylor, Ronnie Walker and Laura Nicolae, 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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