

US Economics Analyst

Winter Growth Update: Darker Before Dawn (Choi/Hill)

- We retain high conviction in our arguments for above-consensus GDP growth in 2021 and 2022. However, the rapid and broad-based resurgence of the coronavirus has led us to downgrade our Q4 and Q1 GDP forecasts. We now expect +3.5% and +1.0% annualized growth in Q4 and Q1 (qoq ar, respectively, vs. +4.5% and +3.5% previously).
- The larger drag in the winter should imply an even larger reacceleration on the back of mass immunization. We have thus increased our Q2 and Q3 growth forecasts to +9.5% and +7.0%, respectively (vs. +7.0% and +6.0% previously), leaving the end-2021 level of output unchanged. Our new growth path implies 2021 GDP growth of +5.0% (vs. +5.3% previously) on a full-year basis, still well above consensus expectations, and +5.5% (vs. +5.2% previously) on a Q4/Q4 basis.
- Timely data in virus-sensitive industries show clear signs of a growing hit from the virus resurgence. State and local restrictions have also ramped up over the last week, although they remain well short of measures taken earlier this year and more recently in Europe.
- The policy and consumer spending responses will likely vary substantially by state and region. We expect the largest hit in the Northeast, where lower temperatures will likely mean a larger virus headwind and where policymakers have indicated more willingness to impose restrictions, and the smallest hit in the South. We expect sequential declines in consumer services spending over November through January, and now see -1.0% annualized real consumption growth in Q1.
- Our expectation for a winter soft patch also reflects a drag from the reversal of record 2020 election spending and October Amazon Prime Day sales. Together, we expect these two headwinds to lower Q1 growth by 0.5pp.
- The virus situation and fiscal negotiations present the two largest near-term downside risks. Failure to reach a fiscal agreement by the end of Q1 or widespread and more stringent virus restrictions could lead to outright contraction in Q1.
- We previously noted that the FOMC was most likely to extend the average maturity of asset purchases if the economy weakened. The weaker winter conditions in our revised forecast likely meet the bar, and we therefore now

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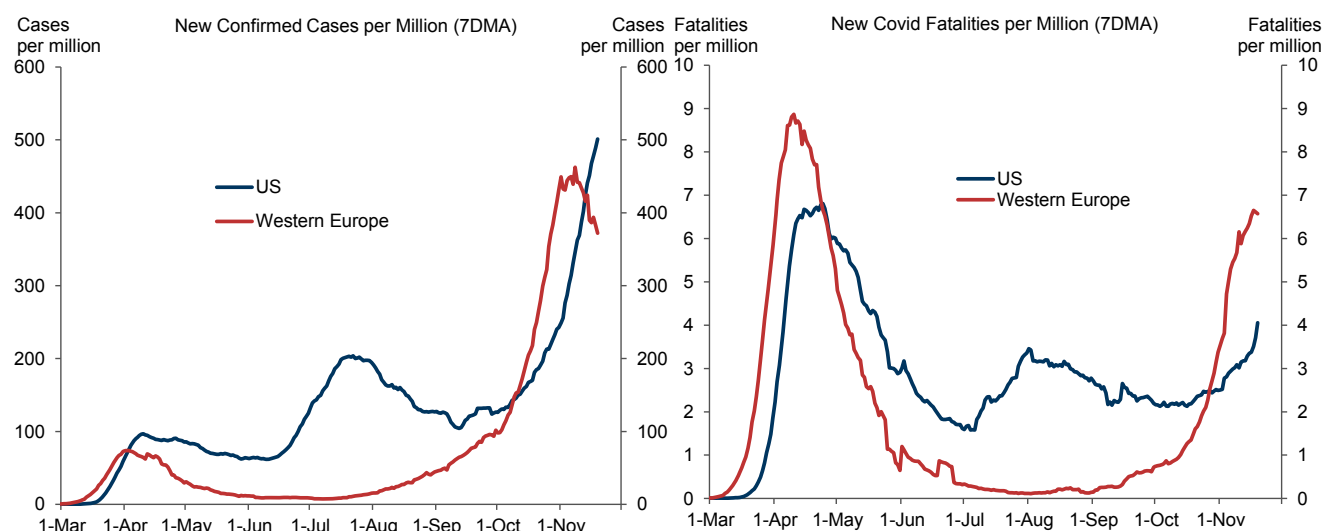
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expect a maturity extension at the December meeting alongside the introduction of a timeline for asset purchases.

Winter Growth Update: Darker Before Dawn

In our *2021 US Economic Outlook*, we argued for above-consensus 2021 growth given our expectation that a vaccine and further fiscal support will accelerate the recovery in the spring and summer. However, we also noted that the pace of recovery would likely slow in the winter months, with a lack of fiscal support and a deteriorating virus situation pointing to significant downside risks. Daily infection rates have since accelerated to well above Western European levels, and daily deaths have reached their highest levels since late May (Exhibit 1).

Exhibit 1: New Virus Cases and Deaths Have Surged



Source: JHU CSSE, Goldman Sachs Global Investment Research

The arguments for strong growth in 2021 still ring true, and any incremental weakness from the virus in the winter will likely be offset by even stronger growth in the spring and summer after the mass distribution of a successful vaccine, where the news has become more positive. We have thus left our end-2021 forecasted level of output unchanged. However, the deterioration in the near-term growth outlook warrants a shift in the quarterly timing of growth, which we revisit in this week's *Analyst*.

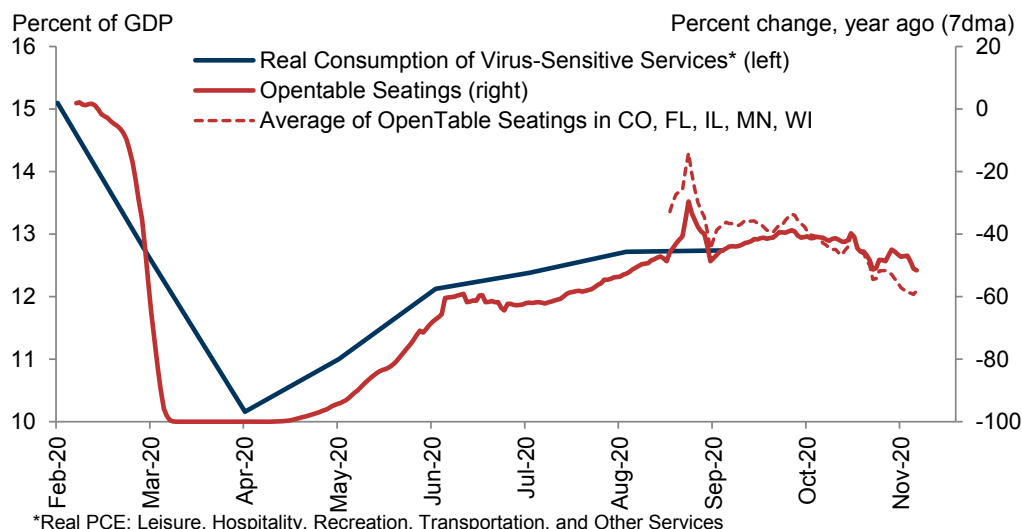
A Sudden Slowdown in November

We begin by assessing the impact of the virus on consumer spending in the virus resurgence thus far.

While not nearly as deep or broad-based as the sudden stop in March and April, we see a fairly consistent pullback in high-frequency consumer activity data over the last two weeks, which coincided with the national deterioration in public health. Echoing the start of the first two waves in March and July, food services activity again appears to be one of the earlier categories to respond to the virus and is one of the first to show a clear impact because timely data are available (OpenTable seatings through November 19th). As shown in Exhibit 2, restaurant activity growth has fallen by 10.5pp during the last seven days relative to the October average (-51.5% vs. -41.0% yoy), with an even more

pronounced slowdown in parts of the country experiencing a sharper pickup in coronavirus infections.

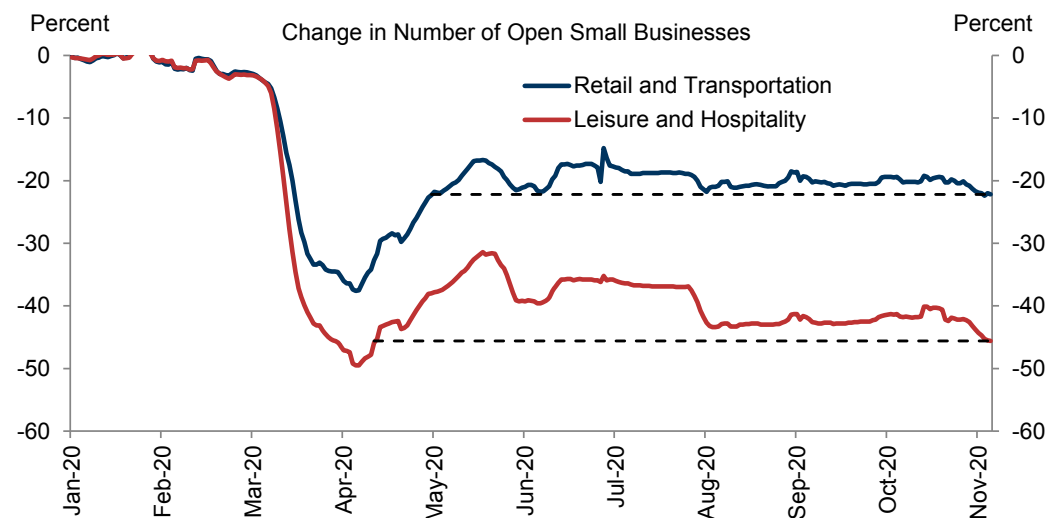
Exhibit 2: Restaurant Activity Has Fallen in the First Half of November, Particularly in the States with a Sharper Virus Surge



Source: OpenTable, Goldman Sachs Global Investment Research

Small businesses have also responded to the resurgence, in many cases going beyond what local restrictions require. As shown in Exhibit 3, the share of small businesses currently open has fallen by 2.3pp in the retail and transportation industry (November 9th vs. October average) and by 4.1pp in the leisure and hospitality industry, on net reversing all of the reopenings that took place since April and May.

Exhibit 3: Temporary Closures of Consumer-Facing Small Businesses Are Back at May Levels

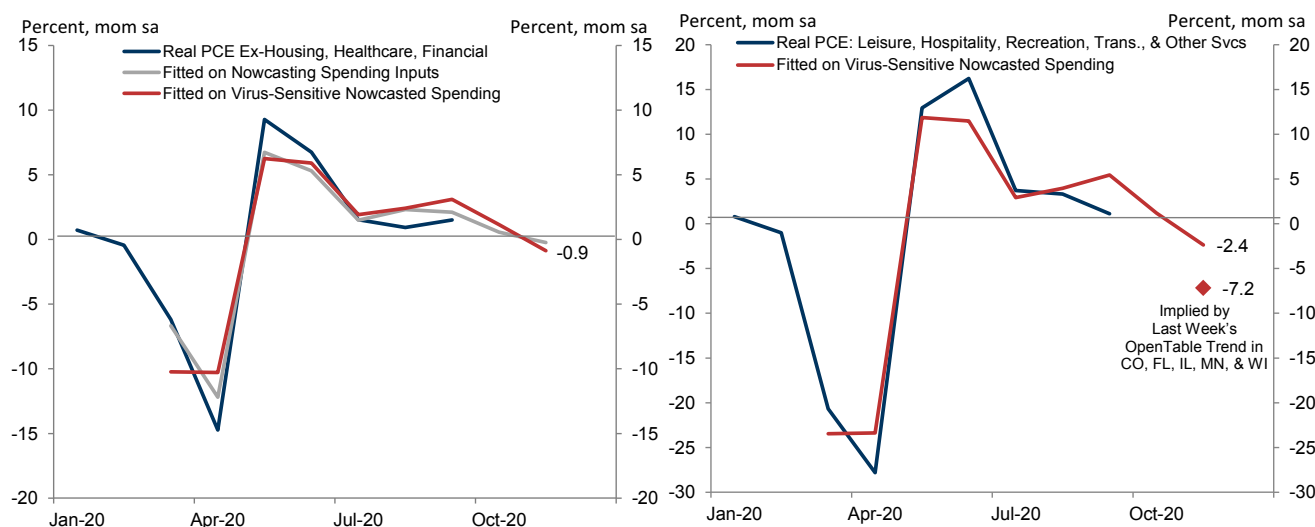


Source: Womply, Opportunity Insights, Goldman Sachs Global Investment Research

To estimate the impact of the virus on November spending, we focus specifically on hard spending and consumption data available through at least the first week of

November.¹ In Exhibit 4, we summarize the November spending nowcasts of seven such measures. In addition to seated dining reservations on OpenTable, we include three timely credit and debit card spending datasets (Fiserv/BEA, Opportunity Insights/Affinity Solutions, and 1010Data). Because the spring and the November spending inflections may have been driven by a subset of particularly virus-sensitive categories,² we also create a consumption-weighted spending basket of virus-sensitive groupings available in these datasets.³ While the Fiserv/BEA card spending measures do not exhibit a pullback (in the November 1-9 period vs. October), each of the other groupings is consistent with a November-to-date decline in virus-sensitive consumption.

Exhibit 4: Spending Trends in the First Two Weeks of November Are Already Consistent with Declining Consumption, Particularly in Virus-Sensitive Categories



Source: Department of Commerce, Affinity, Opportunity Insights, OpenTable, 1010data, Goldman Sachs Global Investment Research

Assuming trend-like growth in housing, healthcare, and financial services (+0.3% in November on net, mom sa), these nowcast inputs imply overall real PCE growth of around -0.8% in November. As shown in the right panel, the nowcast of the most-virus-sensitive subset of consumption (18% of total consumer spending) alone implies a drag of between 0.4pp and 1.3pp on November PCE growth.

A Larger Virus Hit to Come

The public health and economic situation is likely to get worse before it gets better, in our view. We expect virus spread to increase in the absence of further policy restrictions or a change in consumer behavior, given the current trajectory and the likelihood that colder weather will put upward pressure on case growth. The latter is based on our global team's finding of a strong negative correlation between changes in temperature

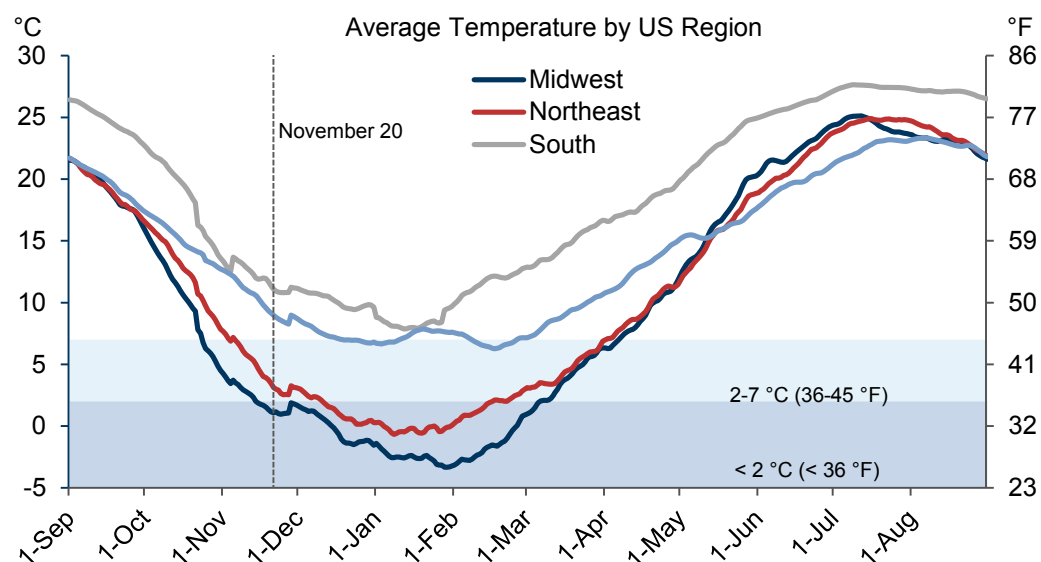
¹ October consumer activity data—while still relevant from a Q4 GDP perspective—are likely too stale to cast light on the consumer response to the third wave of the virus.

² For example, consumption of housing and financial services may not be particularly sensitive to the virus.

³ The resulting seven signals exhibit an average correlation of +0.92 with the official measure of consumption growth (mom sa, real basis; excludes housing, healthcare and financial services and comprises 60% of total consumer spending).

and changes in new cases across countries and US states, and the strong seasonality of related common coronaviruses and the flu. Temperature effects would suggest variation in virus spread by region, with temperatures expected to fall significantly more in the Midwest and Northeast (Exhibit 5).

Exhibit 5: Temperatures Are Expected to Fall Further, Especially in the Midwest and Northeast



Source: National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, Goldman Sachs Global Investment Research

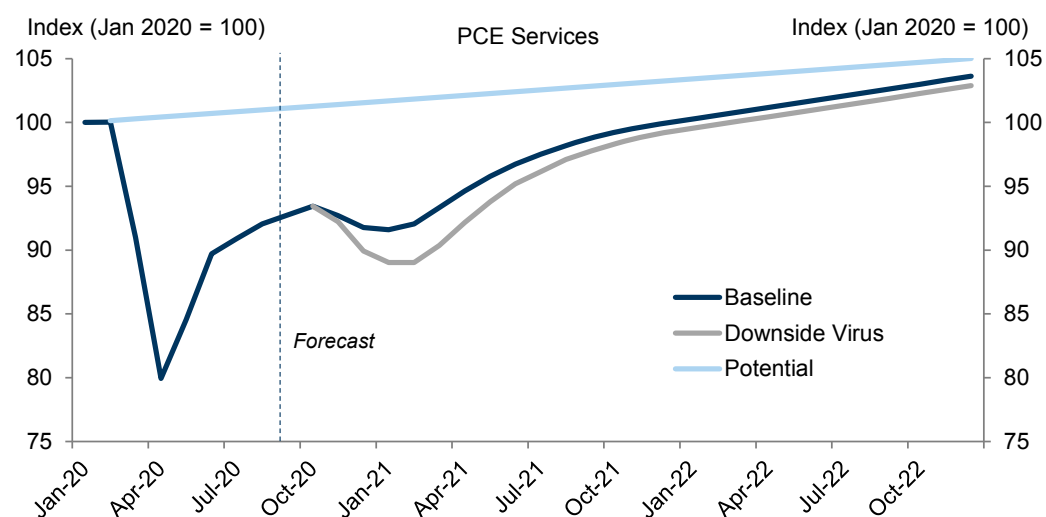
The response from state and local governments has been fairly limited so far—even in areas with acute virus spread—and overall restrictions in place are much less severe than those earlier this year or those in Europe over the last month. This likely means that in the near-term the voluntary response from individuals and businesses will be the more important determinant of economic activity. That said, over the last week a growing number of states have either tightened restrictions or indicated they are likely to soon. With virus spread worsening rapidly nationwide, risks clearly skew toward additional and tighter restrictions, and we expect more to come over the winter months.

The emphasis on more targeted local measures, the differences in governors' attitudes toward virus spread, and the wide variation in temperatures across the country all lead us to believe that the policy and consumer spending response will vary substantially by state and region. We thus use a bottom-up forecast by Census region to estimate the likely hit to economic activity from the virus resurgence.

For all regions, we expect the sharpest sequential monthly contraction to come in December, and the peak level hit to come in January and February, consistent with the timing of the peak spread of other common coronaviruses. We expect the largest hit to the Northeast—where temperatures will decrease significantly further and policymakers have indicated more willingness to impose restrictions—and in our baseline forecast we assume that consumer services activity in the Northeast retrenches back to June levels. We expect a somewhat smaller virus impact on the Midwest and the West, where we assume services activity declines to July/August levels, and the smallest impact on the South, where we assume that services activity edges back down to September levels.

Combining our regional projections would suggest a significant pullback in overall services spending to roughly July/August levels (Exhibit 6). Our estimates are consistent with a smaller consumer spending drag for a given amount of virus spread than in the summer months, but significantly worse virus spread overall. We expect a reacceleration in services activity starting in March, as warmer weather and a vaccine for health care workers and the highest at-risk population allows for a return to reopening, and even quicker growth starting in April as a vaccine starts to become more widely available. Combined with our goods consumption forecasts, we now forecast -1% overall PCE growth in Q1 (qoq ar), and +10% and +8.5% PCE growth in Q2 and Q3, respectively.

Exhibit 6: We Expect Services Activity to Contract Over November through January



Source: Department of Commerce, Goldman Sachs Global Investment Research

As a downside case, we consider a scenario where virus restrictions lead to a stronger pullback in activity across all regions. Exhibit 6 shows a downside scenario where Northeast services activity falls all the way back to May levels, the Midwest and West declines to June levels, and the South declines to July levels. Once again based on seasonal patterns and because of our expectation of an effective vaccine, we believe further downside from worse virus spread would likely prove mostly temporary, implying an even faster pace of growth starting in Q2.

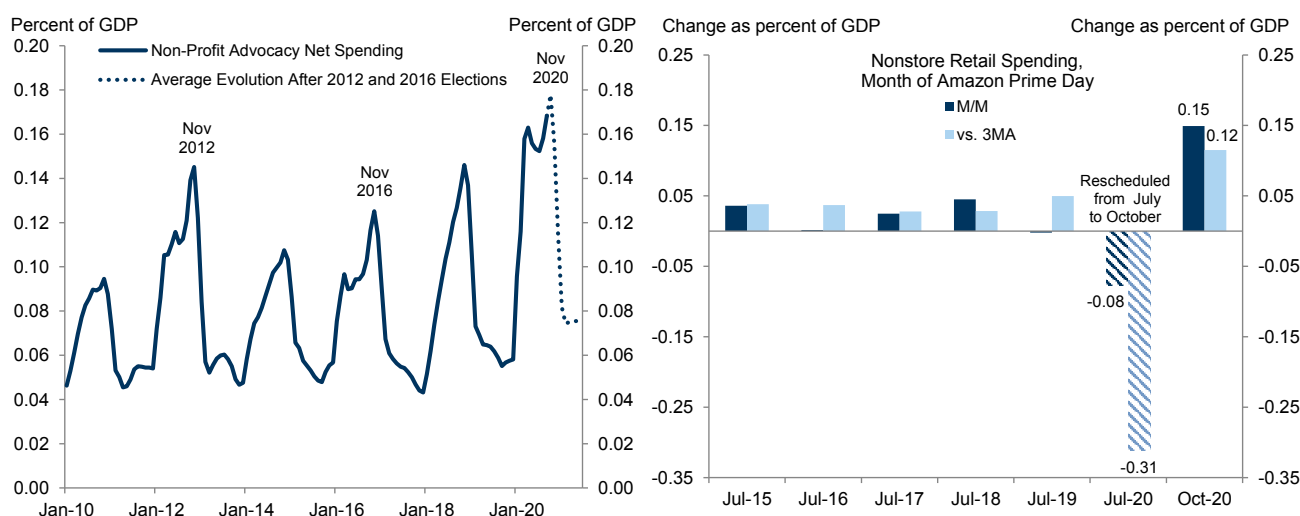
Q4, Q1, and Downside Risks

We next turn to our Q4 and Q1 GDP forecasts. While the course of the virus and the timing and scale of fiscal support will play the largest role in determining the near-term growth path, there are several other meaningful idiosyncratic headwinds to account for.

One is the reversal of record election spending. As shown in the left panel of Exhibit 7, the 2020 election drove record levels of non-profit advocacy spending, which is recorded as consumption in the national accounts. Based on the normalization pattern following the last two presidential elections (dotted line), we estimate a net drag on annualized GDP growth of -0.05pp in Q4 and -0.3pp in Q1.

Another is the later-than-usual timing of Amazon Prime Day (normally in July). While the October retail sales report was weaker than expected, one bright spot was the 3.1% increase in the non-store category. Unlike in previous years, the seasonal factors were not trained to anticipate this spending increase, implying scope for a drag on November, December, and Q1 consumption growth (Exhibit 7, right panel). Together, we expect these headwinds to lower Q1 growth by 0.5pp, and also weigh at the margin on November and December data on net.⁴

Exhibit 7: Payback from Record Election Spending and Amazon Prime Day to Reduce Q1 Growth by 0.5pp (and Dampen Sequential Growth in Nov/Dec)



Source: Department of Commerce, Goldman Sachs Global Investment Research

Based on our nowcast estimates, our estimates of the virus impact on the economy, and the headwinds from the reversal of election spending and the timing of Amazon Prime Day, we now estimate Q4 GDP growth of +3.5% (vs. +4.5% previously), and Q1 growth of +1.0% (vs. +3.5% previously). The uncertainty around our forecast—particularly for Q1—is large, with near-term risks tilted to the downside, given the virus situation and ongoing fiscal negotiations.

Our baseline forecast is based on our expectation of a fiscal agreement after inauguration totaling \$700bn, as well as a December extension of emergency unemployment benefits (Pandemic Unemployment Assistance and Pandemic Emergency Unemployment Compensation). We estimate that earlier fiscal support passed in December and arriving at the beginning of Q1—which looks increasingly unlikely—would provide a 1.5pp boost to Q1 growth (qoq ar), while a delay in fiscal support until after Q1 represents a downside risk of -1.5pp to Q1 growth, with an additional drag on subsequent quarters if fiscal support never arrives. Exhibit 8 shows our estimates of Q1 growth under several different virus and fiscal assumptions.

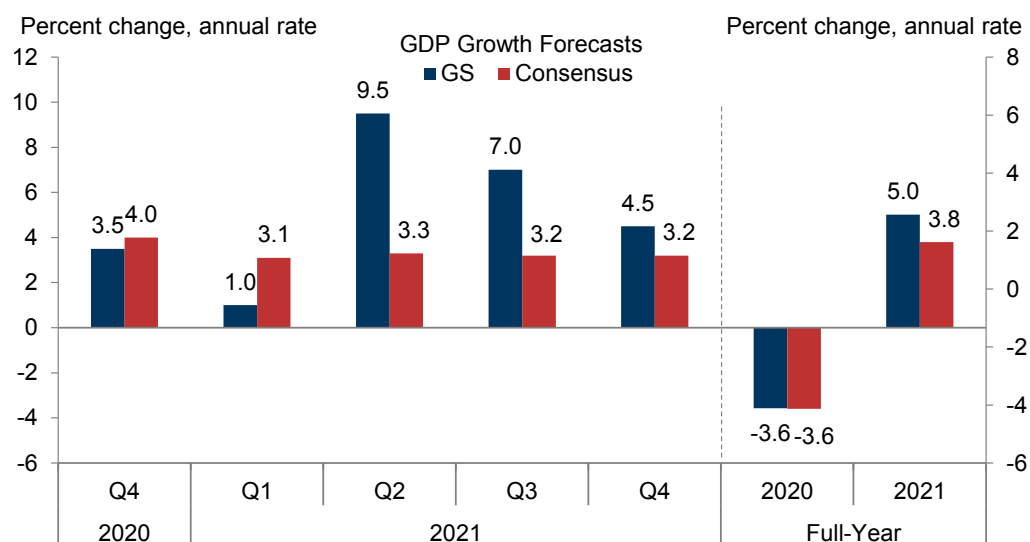
⁴ While the recertification of the Boeing 737 MAX is a positive growth development, the likely gradual ramp-up of production suggests the return of that 0.3% of GDP may take several years—implying an annualized impact on Q1 growth of only a couple tenths.

Exhibit 8: The Virus and the Potential for No Fiscal Deal Present Significant Downside Risks to Q1 Growth

Q1 Growth Forecast (QoQ AR)			
Fiscal Scenario			
	December Deal	After Inaguration	No Deal Through Q1
Baseline			
Virus	+2.5	+1.0	-0.5
Downside Virus	-1.5	-3.0	-4.5

Source: Goldman Sachs Global Investment Research

While we have taken down our Q4 and Q1 forecasts based on the worsening virus news, the larger drag in the winter should imply an even larger reacceleration after the arrival of a successful vaccine. We have thus increased our Q2 and Q3 growth forecasts to +9.5% and +7.0%, respectively (vs. +7.0% and +6.0% previously), leaving the end-2021 level of output roughly unchanged. Our new growth path implies 2021 GDP growth of +5.0% (previously +5.3%) vs. 3.8% consensus on a full-year basis, or +5.5% (previously +5.2%) vs. +3.2% consensus on a Q4/Q4 basis. Exhibit 9 compares our updated forecasts against consensus expectations.

Exhibit 9: A Colder Winter, A Hotter Spring: GS Growth Forecast vs. Consensus


Source: Bloomberg, Goldman Sachs Global Investment Research

Fed Implications

We previously noted that the FOMC was most likely to extend the average maturity of asset purchases if the economy weakened, even though participants have expressed only lukewarm support for this option because of its limited effectiveness. We think the weaker winter conditions in our revised forecast likely meet the bar, and we therefore now expect a maturity extension at the December meeting alongside the introduction of a timeline for asset purchases. The economic impact of the maturity extension is likely to be limited: rates are already very low, the rate-sensitive housing sector is already experiencing blistering demand and constrained mainly by supply, and the hardest-hit

virus-sensitive areas of the economy are unlikely to benefit much. We expect most FOMC participants will take the same view but support an extension anyway, with only a minority objecting that financial conditions are already very easy and that the shock will be short-lived while the policy will persist. The Treasury's decision not to extend most Fed credit facilities has probably made a maturity extension a bit more likely as a way of supporting market confidence.

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The US Economic and Financial Outlook

Forecast Changes

The rapid and broad-based resurgence of the coronavirus has led us to downgrade our Q4 and Q1 GDP forecasts. We now expect +3.5% and +1.0% annualized growth in Q4 and Q1 (qoq ar, respectively, vs. +4.5% and +3.5% previously). We have increased our Q2 and Q3 growth forecasts to +9.5% and +7.0%, respectively (vs. +7.0% and +6.0% previously). Our new growth path implies 2021 GDP growth of +5.0% (vs. +5.3% previously) on a full-year basis, and +5.5% (vs. +5.2% previously) on a Q4/Q4 basis.

THE US ECONOMIC AND FINANCIAL OUTLOOK

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

	2018	2019	2020 (f)	2021 (f)	2022 (f)	2023 (f)	2024 (f)	Q1	2020 Q2	Q3	Q4	Q1	2021 Q2	Q3	Q4
OUTPUT AND SPENDING															
Real GDP	3.0	2.2	-3.6	5.0	4.1	2.4	2.1	-5.0	-31.4	33.1	3.5	1.0	9.5	7.0	4.5
Real GDP (annual=Q4/Q4, quarterly=yoy)	2.5	2.3	-2.6	5.5	2.7	2.3	2.0	0.3	-9.0	-2.9	-2.6	-1.2	11.1	5.2	5.5
Consumer Expenditures	2.7	2.4	-3.9	5.1	4.6	2.4	2.1	-6.9	-33.2	40.7	2.5	-1.0	10.0	8.5	5.0
Residential Fixed Investment	-0.6	-1.7	5.5	13.3	5.0	2.7	2.0	19.0	-35.5	59.3	31.8	8.0	7.0	7.0	6.0
Business Fixed Investment	6.9	2.9	-4.9	4.2	4.7	3.9	3.6	-6.7	-27.2	20.3	2.7	5.0	6.9	4.8	4.6
Structures	3.7	-0.6	-11.0	-6.8	2.4	3.1	2.5	-3.7	-33.6	-14.6	-12.1	-1.0	1.0	1.0	1.0
Equipment	8.0	2.1	-5.7	10.2	4.5	2.7	2.5	-15.2	-35.9	70.1	9.2	7.0	10.0	5.0	5.0
Intellectual Property Products	7.8	6.4	0.2	3.7	6.1	5.7	5.5	2.4	-11.4	-1.0	4.0	6.0	6.5	6.5	6.0
Federal Government	2.8	4.0	4.6	1.6	0.1	0.0	0.0	1.5	16.5	-6.2	3.0	3.0	1.0	0.0	0.0
State & Local Government	1.2	1.3	-0.7	-1.4	-0.1	0.0	0.0	1.1	-5.4	-3.3	-1.0	-1.0	-1.0	0.0	0.0
Net Exports (\$bn, '09)	-878	-918	-901	-1,035	-1,001	-983	-973	-788	-775	-1011	-1029	-1036	-1043	-1037	-1025
Inventory Investment (\$bn, '09)	53	49	-85	108	79	65	65	-81	-287	-1	30	60	125	125	120
Industrial Production, Mfg.	2.3	-0.2	-6.7	8.9	5.5	2.7	2.0	-5.5	-46.7	55.2	14.5	4.2	11.2	9.5	6.8
HOUSING MARKET															
Housing Starts (units, thous)	1,248	1,295	1,358	1,440	1,519	--	--	1,484	1,079	1,440	1,430	1,398	1,370	1,502	1,492
New Home Sales (units, thous)	614	685	806	736	803	795	795	701	703	973	846	720	706	746	774
Existing Home Sales (units, thous)	5,334	5,330	5,341	5,493	5,595	5,698	5,803	5,483	4,313	6,137	5,433	5,457	5,480	5,505	5,530
Case-Shiller Home Prices (%yoy)*	4.0	3.4	4.2	3.7	2.4	2.5	--	4.2	3.8	4.3	4.2	3.9	4.7	4.2	3.7
INFLATION (% ch, yr/yr)															
Consumer Price Index (CPI) (annual=Q4/Q4)	2.2	2.0	1.0	1.8	2.0	2.1	2.3	2.1	0.4	1.3	1.0	1.2	2.6	1.7	1.8
Core CPI (annual=Q4/Q4)	2.2	2.3	1.6	1.7	2.1	2.3	2.5	2.2	1.3	1.7	1.6	1.4	2.3	1.6	1.7
Core PCE** (annual=Q4/Q4)	2.0	1.6	1.5	1.6	1.7	1.9	2.0	1.8	1.0	1.4	1.5	1.5	2.1	1.7	1.6
LABOR MARKET															
Unemployment Rate (%)^	3.9	3.5	6.9	5.3	4.8	4.3	3.9	4.4	11.1	7.9	6.9	6.6	6.3	5.6	5.3
U6 Underemployment Rate (%)^	7.6	6.7	11.8	9.5	8.9	8.4	7.8	8.7	18.0	12.8	11.8	11.2	10.7	9.9	9.5
Payrolls (thous, monthly rate)	193	178	-760	458	215	159	155	-303	-4,427	1,309	379	267	583	558	422
GOVERNMENT FINANCE															
Federal Budget (FY, \$bn)	-779	-984	-3,132	-2,250	-1,450	-1,400	-1,400	--	--	--	--	--	--	--	--
FINANCIAL INDICATORS															
FF Target Range (Bottom-Top, %)^	2.25-2.5	1.5-1.75	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25
10-Year Treasury Note^	2.69	1.92	0.75	1.30	1.65	1.85	2.05	0.70	0.66	0.69	0.75	0.85	1.00	1.15	1.30
Euro (€/€)^	1.15	1.12	1.18	1.25	1.28	1.30	1.30	1.10	1.12	1.17	1.18	1.18	1.21	1.23	1.25
Yen (\$/¥)^	110	109	103	100	100	99	99	108	108	106	103	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.

** 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
Mon	Nov 23	8:30 Markit US Manufacturing PMI (November preliminary)	n.a.	53.0	53.4
		9:45 Markit US Services PMI (November preliminary)	n.a.	55.0	56.9
Tue	Nov 24	9:00 FHFA House Price Index (September)	n.a.	+0.5%	+1.5%
		9:00 S&P/Case Shiller Home Price Index (September)	+0.7%	+0.65%	+0.47%
		10:00 Conference Board Consumer Confidence	98.0	97.2	100.9
		10:00 Richmond Fed Manufacturing Index (November)	n.a.	21	29
Wed	Nov 25	8:30 Initial Jobless Claims	715k	730k	742k
		Continuing Claims	n.a.	6,000k	6,372k
		8:30 Advance Goods Trade Balance	-\$81.0bn	-\$80.0bn	-\$79.4bn
		8:30 Wholesale Inventories (October preliminary)	n.a.	+0.3%	+0.4%
		8:30 Real GDP (Q3 second)	+33.4%	+33.1%	+33.1%
		Personal Consumption (Q3 second)	+40.9%	+40.8%	+40.7%
		8:30 Durable Goods Orders (October preliminary)	+1.0%	+0.9%	+1.9%
		8:30 Ex-Transport	+0.7%	+0.4%	+0.9%
		8:30 Core Capital Goods Orders (October)	+0.5%	+0.7%	+1.0%
		8:30 Core Capital Goods Shipments (October)	+0.5%	+0.3%	+0.5%
		10:00 Personal Income (October)	-0.8%	-0.1%	+0.9%
		10:00 Personal Spending (October)	+0.7%	+0.3%	+1.4%
		10:00 PCE Price Index (October)	+0.06%	flat	+0.2%
		10:00 Core PCE Price Index (October)	+0.06%	flat	+0.2%
		10:00 UMich Consumer Sentiment (November final)	76.0	77.0	77.0
		10:00 New Home Sales (October)	+0.5%	+1.4%	-3.5%
		14:00 Minutes of the November 4–5 FOMC Meeting			

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Daan Struyven, David Choi, 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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