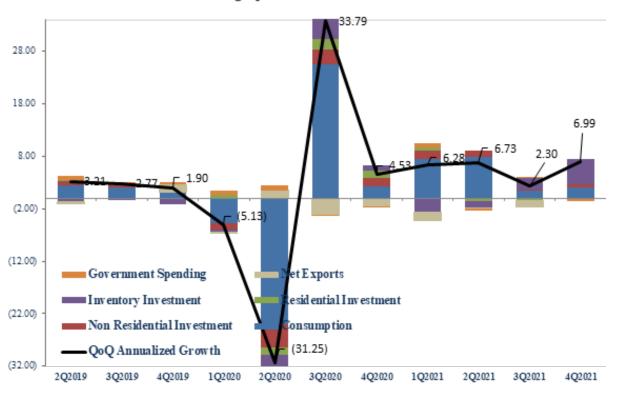


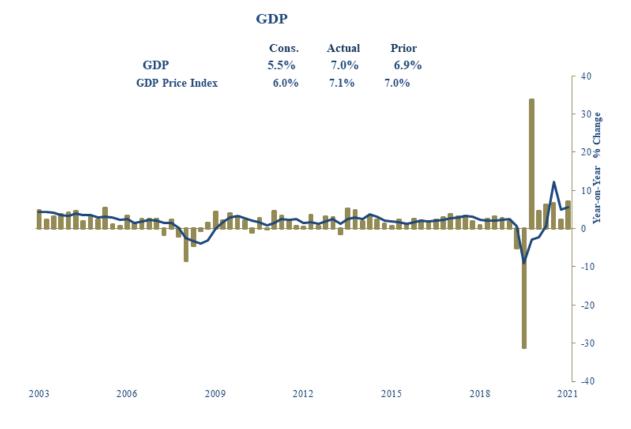
24.Feb.2022

4Q21 GDP: Upward Revisions, 1st Quarter Tracking Lower

Bottom Line: The second estimate of 4th Quarter GDP showed even more vigorous growth than first reported, up 7% annualized, as expected. Consumption added 210 basis points, down about 20bps from the initial report. But businesses fixed investment and residential investment were revised notably higher. Inventory investment, typically transitory, remained the most significant contributor, adding 490bps, unchanged from the initial estimate. Overall, looking through the volatility in inventory investment, the recovery remained robust, but the pace of gains of crucial categories like consumption was decelerating. This report still supports the consensus notion that growth should steadily decelerate over 2022, likely falling to the 2.5 - 4% annualized range. 1st Quarter will likely be notably lower with inventory investment giving back gains-- early estimates are in the 1.25 - 1.75% range.

US Quarterly GDP (seas. adj. ann rate) with contributions in bar graphs





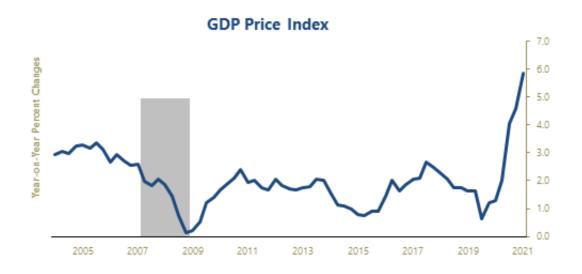
GDP was REVISED UP by 0.1 points to 7.0% in this second estimate of economic activity for Q4-21. This was in line with market expectations.

Economic activity was 5.6% ABOVE its year-ago level and 32.1% ABOVE its 2007 Q4 cyclical peak. Because most of the adjustment was due to new December data, this revision suggests that the economic activity increased slightly at the end of the quarter.

Consumer Spending was revised lower by -0.18% to 3.1%, contributing 2.13% to economic growth. **Business Fixed Investment** was revised higher by 1.09% to 3.1%, contributing 0.43% to economic growth. **Residential Investment** was revised higher by 1.85% to 1.0%, contributing 0.05% to economic growth. Inventory Investment was revised slightly lower, contributing 4.90% to economic growth.

Net Exports were revised modestly lower with a modest decline in Exports and slight decline in Imports, contributing -0.07% to economic growth. **Government Purchases** were revised slightly higher and fell modestly for the 4th time in the past 12 quarters, contributing -0.45% to economic growth.

As a result of all of these changes, **Real Final Sales** was revised modestly higher while Real Domestic Demand was revisedhigher. **The GDP Price Index** was REVISED UP by 0.18 points to 7.1%, compared with market expectations of 6.0%. Economy-wide prices are now 6.0% ABOVE its year-ago level.



Nominal GDP



GDP - by annual % Change

	% Change at Annual Rate (unless noted as \$)									
			Quarterly Averages				Annual Averages			
	Q4-21 2nd Est.	Q4-21 Advance	Q3-21	Q2-21	Q1-21	Q4-20	2020	2019	Five Year	Ten Year
Real GDP	7.0	6.9	2.3	6.7	6.3	4.5	-3.4	2.3	1.1	1.6
Consumption Business Fixed Investment	3.1 3.1	3.3 2.0	2.0 1.6	12.0 9.2	11.4 12.9	3.4 12.5	-3.8 -5.3	2.2 4.3	1.2 2.0	1.7 4.1
Residential Investment Inventory Investment (\$ Chg)	1.0 238.0	-0.8 240.3	-7.7 101.7	-11.7 -80.2	13.3 -177.1	34.4 63.5	6.8 -117.4	-0.9 9.4	3.1 -36.0	5.4 -10.0
Net Exports (\$ Change) Exports Imports	-25.1 23.6 17.6	-21.4 24.5 17.7	-72.1 -5.3 4.7	-18.4 7.6 7.1	-93.3 -2.9 9.3	-111.5 22.5 31.3	-37.4 -13.6 -8.9	-41.1 -0.1 1.1	-44.2 -1.5 0.3	-35.3 1.0 2.0
Government Purchases	-2.6	-2.9	0.9	-2.0	4.2	-0.5	2.5	2.2	1.7	0.2
Addendum: Real Final Sales Final Domestic Demand Price Index (final sales)	2.0 2.0 7.1	1.9 1.9 7.0	0.1 1.3 6.1	8.1 8.0 6.3	9.1 10.4 4.5	3.4 5.0 2.2	-2.9 -2.5 1.3	2.2 2.4 1.8	1.3 1.5 1.7	1.7 1.8 1.7

Source: Bureau of Economic Analysis, Department of Commerce via Bloomberg. Our calculations.

Copyright © 2018 Contingent Macro Advisors, LLC. All rights reserved. Reproduction and/or redistribution are expressly prohibited. "Economic Advisory Service" is a registered trademark of Contingent Macro Advisors, LLC. Information contained herein is based on sources we believe to be reliable, but its accuracy is not guaranteed.

T.J. Connelly, Head of Research

February 24, 2022

Steven A. Wood, Sr. Economic Adviser

GDP - by contribution

GDP -- by Contribution

	Quarterly						Annual Averages			
	Q4-21 2nd Est.	Q4-21 Advance	Q3-21	Q2-21	Q1-21	Q4-20	2020	2019	Five Year	Ten Year
Real GDP	7.0	6.9	2.3	6.7	6.3	4.5	-3.4	2.3	1.1	1.6
Consumption Business Fixed Investment	2.1 0.4	2.3 0.3	1.4 0.2	7.9 1.2	7.4 1.7	2.3 1.6	-2.6 -0.7	1.5 0.6	0.8 0.3	1.1 0.5
Residential Investment Inventory Investment (\$ Cho	0.1 4.9	0.0 4.9	-0.4 2.2	-0.6 -1.3	0.6 -2.6	1.3 1.1	0.3 -0.5	0.0 0.1	0.1 -0.2	0.2 0.0
Net Exports (\$ Change) Exports Imports	-0.1 2.4 -2.4	0.0 2.4 -2.4	-1.3 -0.6 -0.7	-0.2 0.8 -1.0	-1.6 -0.3 -1.3	-1.7 2.1 -3.7	-0.3 -1.6 1.3	-0.2 0.0 -0.2	-0.2 -0.1 -0.1	-0.2 0.2 -0.3
Government Purchases	-0.5	-0.5	0.2	-0.4	8.0	-0.1	0.4	0.4	0.3	0.0
Others: Defense Intellectual Property Equipment	-0.2 0.5 0.1	-0.2 0.5 0.1	-0.1 0.5 -0.1	0.0 0.6 0.7	-0.3 0.8 0.8	0.2 0.5 1.3	0.1 0.1 -0.5	0.2 0.3 0.2	0.1 0.3 0.0	0.0 0.2 0.2
Medical Care	0.6	8.0	0.5	1.1	-0.5	1.5	-1.0	0.4	0.1	0.2

Source: Bureau of Economic Analysis, Department of Commerce via Bloomberg. Our calculations.