

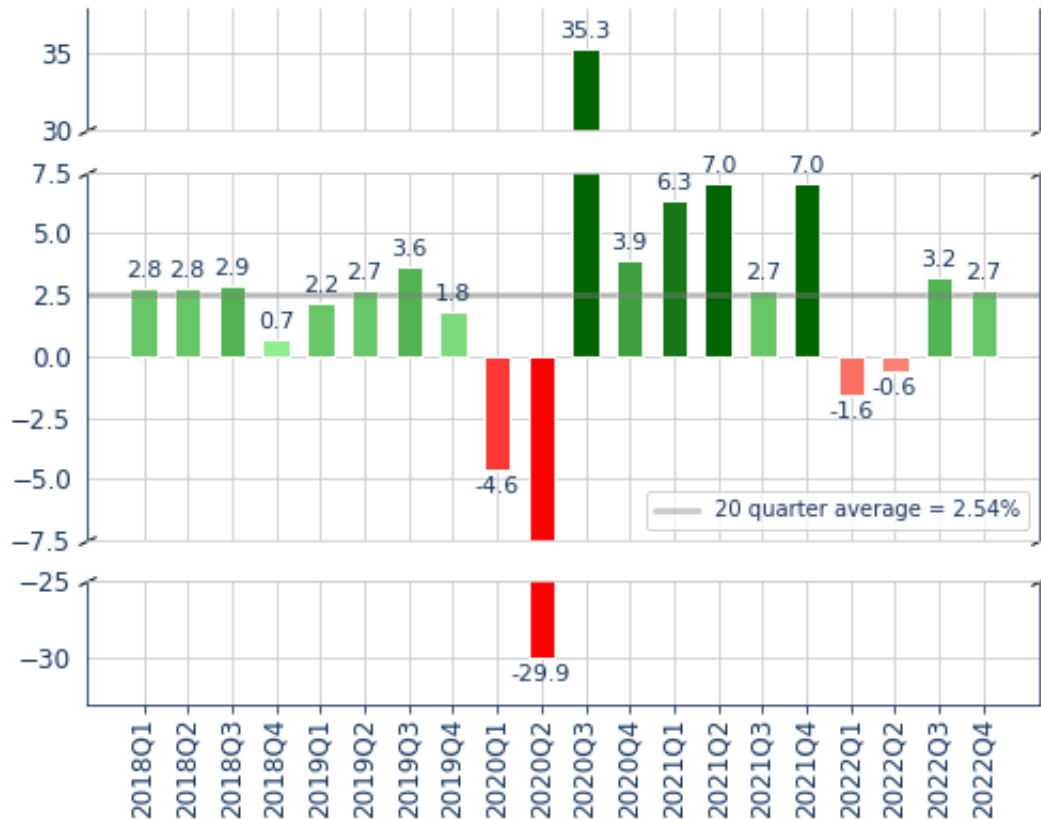
23.Feb.2023

4Q22 GDP: Consumer Ended 2022 On A Slow Note

Bottom Line: The 4th Quarter ended on a slow note for consumption. GDP was revised from 2.9% to 2.7%, with consumption dropping from gains of 2.1% to just 1.4% annualized on the Quarter. This suggests the consumer finished the 4th Quarter on a lower note. And most indications (after adjusting for misleading seasonal adjustments) suggest that slower consumption continued into the first half of the current quarter. Most of the growth in the Quarter was due to rebounding inventories. Real final domestic demand, a gauge of trend growth that strips out the volatile trade and inventory components, advanced at just 0.13% annualized, lower than previously reported and one of the lowest readings outside of recessions. On the plus side, nonresidential business investment was revised higher. **Overall, in 2022 the declines in growth in the 1st Half combined with the modest rebound in the 2nd Half left growth barely outpacing inflation for real GDP gains on the year of under 1%, well below trend. And these latest revisions leave concern that the consumer started the current Quarter on a slow note. Street consensus for the current Quarter is just 0.4% annualized, while our models are closer to 1%.**

US GDP rose 2.7% in the 4th Quarter

The quarter was revised lower from 2.9%, below consensus of 2.9%



US Real GDP (QoQ SAAR) Headline Components	4Q '22	3Q '22	2Q '22	1Q '22	4Q '21	3Q '21
Gross domestic product	2.70	3.20	-0.60	-1.60	7.00	2.70
Personal consumption expenditures	1.40	2.30	2.00	1.30	3.10	3.00
Gross private domestic investment	3.70	-9.60	-14.10	5.40	32.00	10.40
Exports	-1.60	14.60	13.80	-4.60	23.50	-1.10
Imports	-4.20	-7.30	2.20	18.40	18.60	6.60
Government consumption expenditures and gross investment	3.60	3.70	-1.60	-2.30	-1.00	-0.20

Quarter-over-quarter seasonally adjusted rates. Source: US BEA.

Personal consumption expenditures were revised lower from 2.1% to 1.4%.

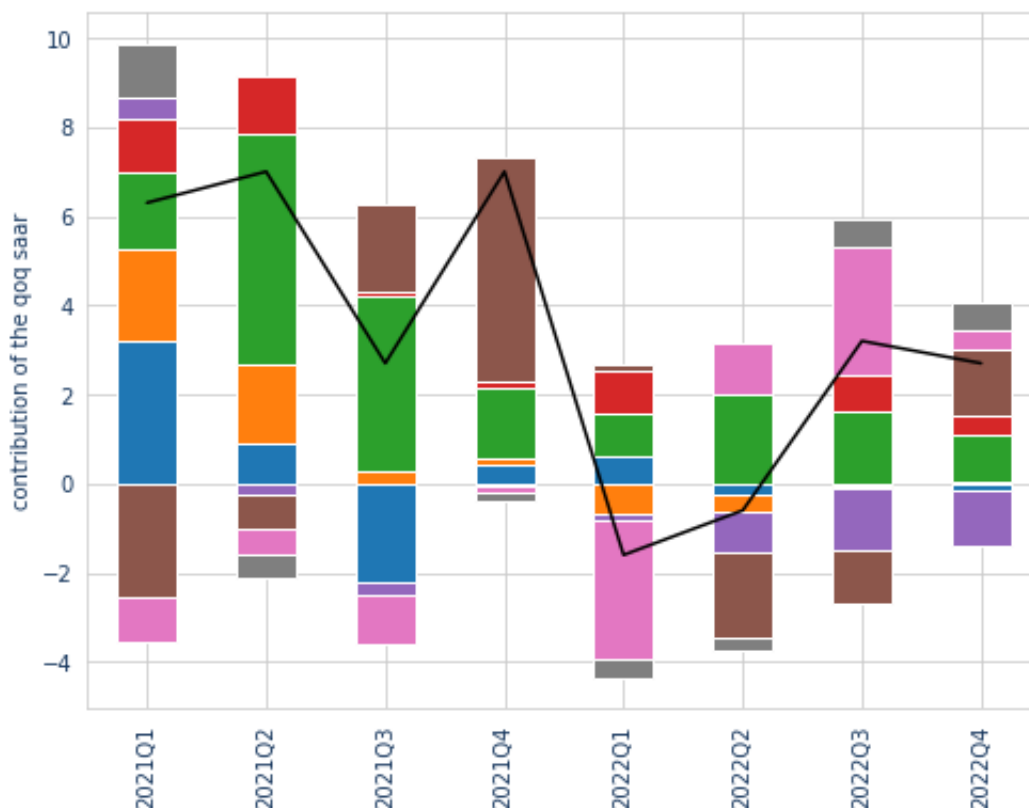
Gross private domestic investment was revised sharply higher from 1.4% to 3.7%.

Exports were revised lower from -1.3% to -1.6%, while **Imports** were revised sharply higher from -4.6% to -4.2%.

Government consumption expenditures and gross investment was revised lower from 3.7% to 3.6%.

US Real GDP by component

Inventory rebuilding was the largest driver of the quarter.



— GDP qoq saar	■ Consumption - Services	■ Change in inventories
■ Consumption - Durable Goods	■ Fixed Investment - Nonresidential	■ Net exports
■ Consumption - Nondurable goods	■ Fixed Investment - Residential	■ Government

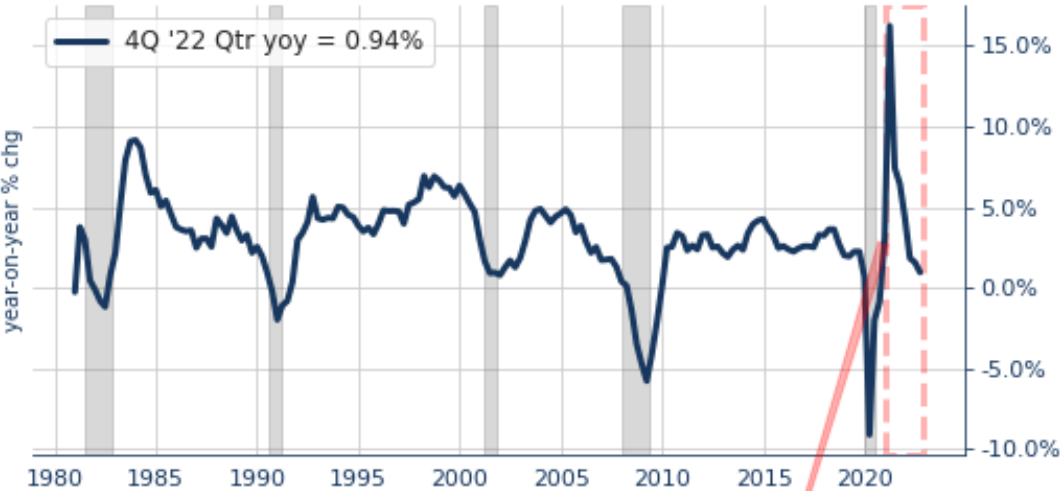
US Real GDP Breakdown by Contribution to Total	4Q '22	3Q '22	2Q '22	1Q '22	4Q '21	3Q '21
GDP qoq saar	2.70	3.20	-0.60	-1.60	7.00	2.70
Consumption - Durable Goods	-0.16	-0.07	-0.24	0.64	0.44	-2.22
Consumption - Nondurable goods	0.03	-0.01	-0.37	-0.66	0.12	0.26
Consumption - Services	1.06	1.63	1.99	0.93	1.58	3.94
Fixed Investment -	0.43	0.80	0.01	0.98	0.17	0.10

Nonresidential						
Fixed Investment - Residential	-1.24	-1.42	-0.93	-0.15	-0.05	-0.29
Change in inventories	1.47	-1.19	-1.91	0.15	5.01	1.96
Net exports	0.46	2.86	1.16	-3.13	-0.16	-1.08
Government	0.63	0.65	-0.29	-0.40	-0.16	-0.02

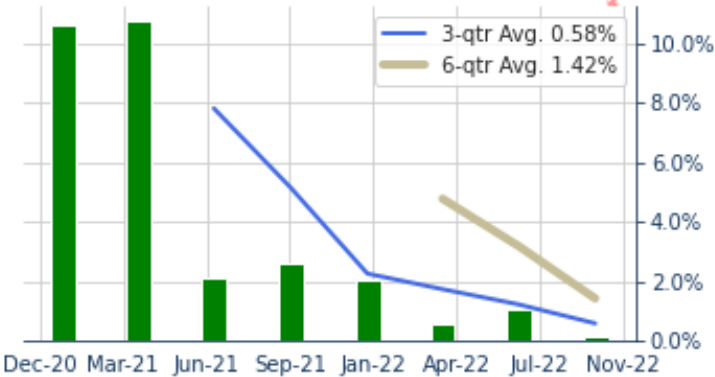
Quarter-over-quarter seasonally adjusted rates. Source: US BEA.

Real Final Domestic Demand

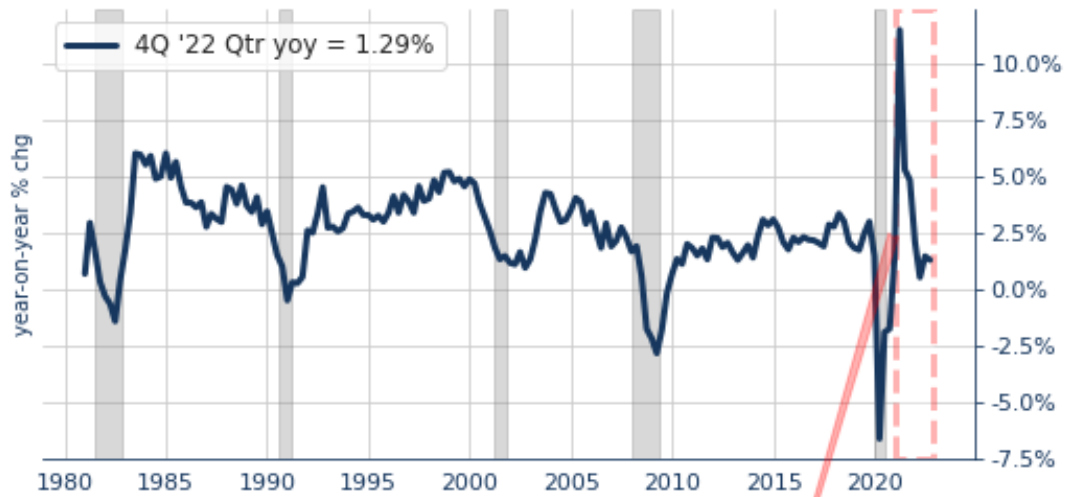
The quarter was revised lower from 0.25% to 0.13%.



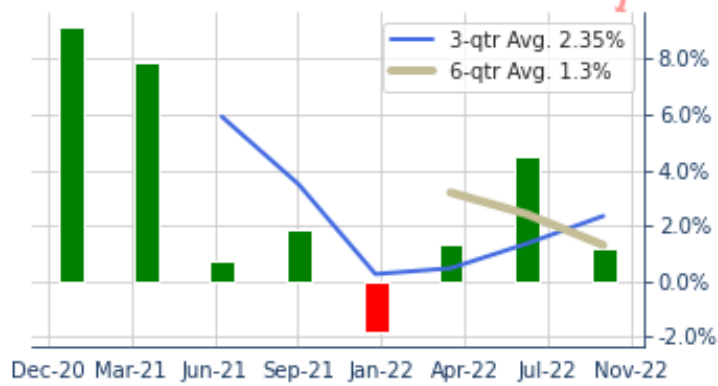
QoQ annualized (4Q '22 Qtr = 0.13%)



Real Final Sales

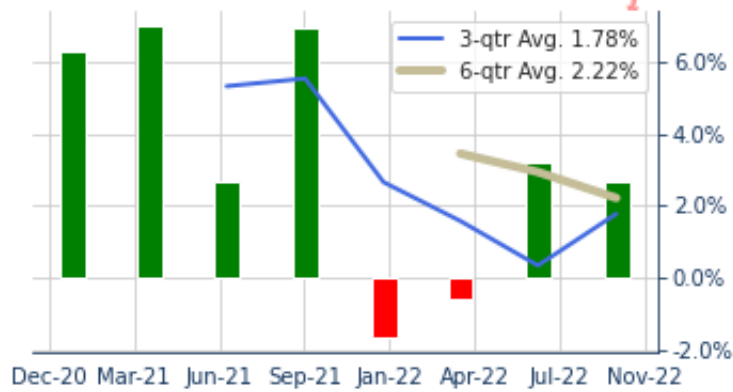


QoQ annualized (4Q '22 Qtr = 1.2%)



Real GDP

Averaged 2.31% in the five years before the pandemic



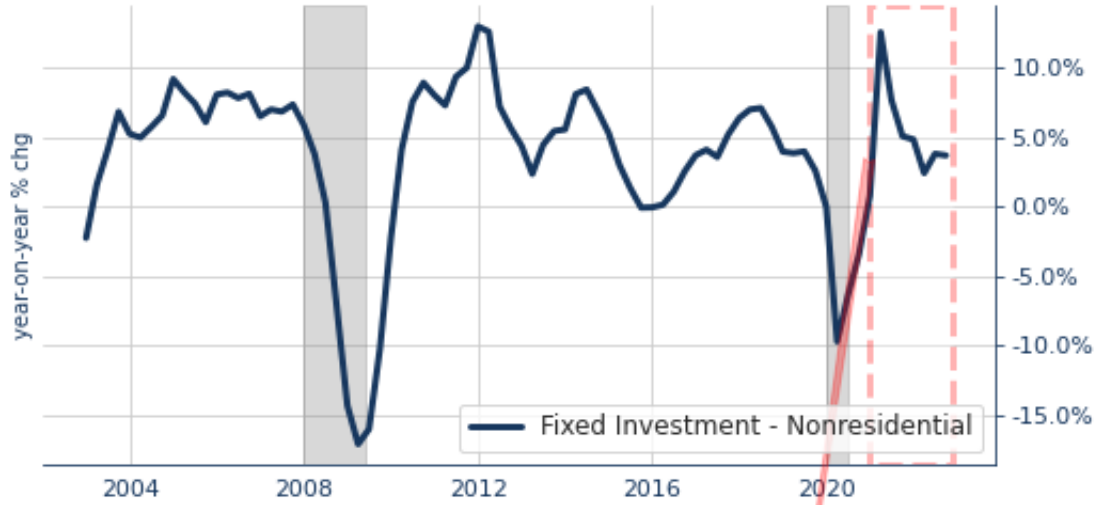
Contingent Macro Advisors 2023 source: US BEA

Real & Nominal GDP Year-over-Year

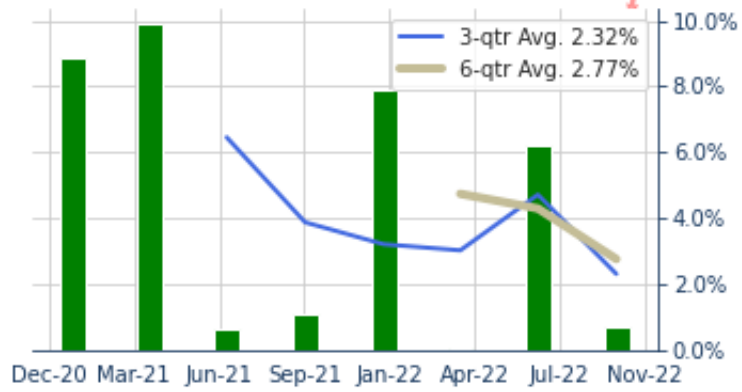
Nominal GDP (7.38%) was 647bps over Real GDP (0.91%).



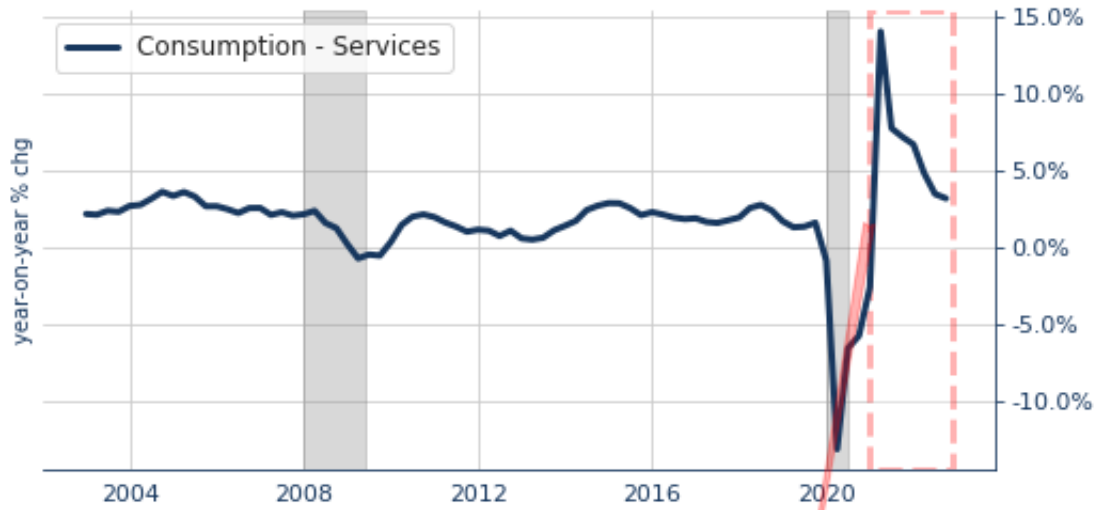
Fixed Investment - Nonresidential



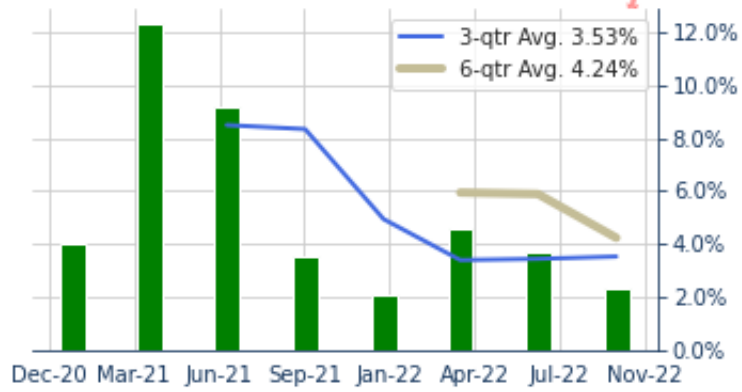
QoQ annualized (4th Qtr = 0.68%)



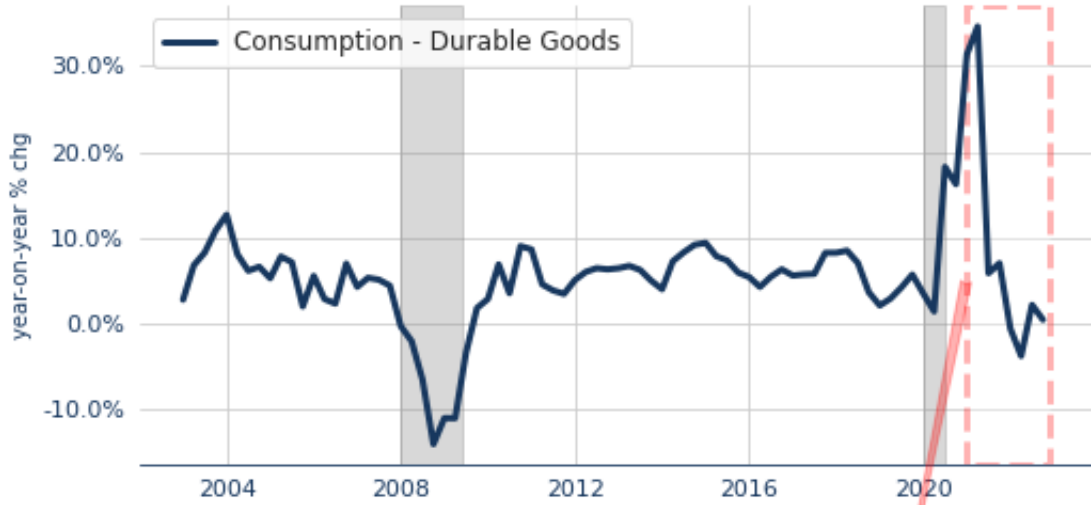
Consumption - Services



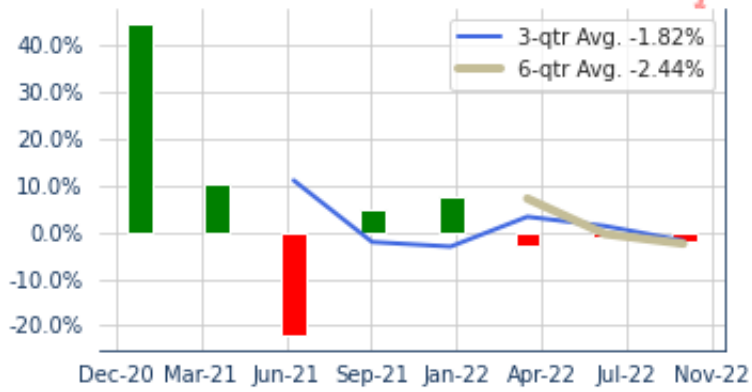
QoQ annualized (4th Qtr = 2.37%)



Consumption - Durable Goods



QoQ annualized (4th Qtr = -1.85%)



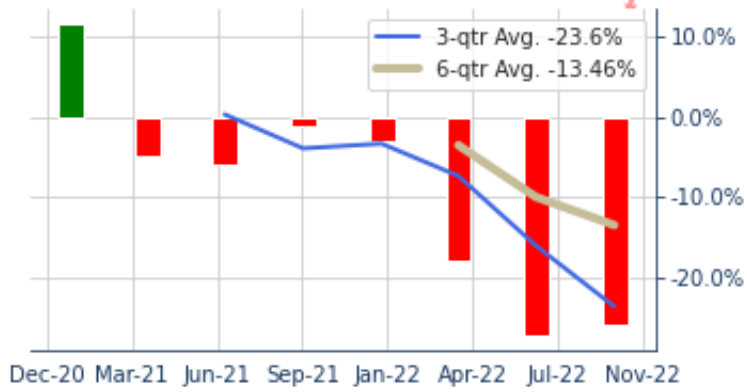
Consumption - Nondurable goods



Fixed Investment - Residential



QoQ annualized (4th Qtr = -25.85%)



Government



QoQ annualized (4th Qtr = 3.62%)

