John Williams' Shadow Government Statistics Analysis Behind and Beyond Government Economic Reporting

Bullet Edition Number 17

Despite a "Perfect" Economy, Fed Actions Have Triggered a Deepening Recession

December 23, 2019

The Faltering and Not-So-Perfect Economy Can Be Attributed to the Fed

With Stocks Closing Out 2019 at or Near All-Time Highs, Holding Precious Metals in the Same Period Still Outperformed the Major Stock Indices Against Their 2018 Highs

FOMC Manipulation of the Monetary Base and Interest Rates Have Been the Dominant Drivers and Inhibitors of U.S. Economic Activity, Since the 2008 Banking-System Collapse and Federal Reserve Bailout

Unprecedented in 101 years of Reporting, U.S. Manufacturing Just Completed Twelve Years, 144 Straight Months and Counting, of Economic Non-Expansion, Never Recovering Its Pre-Great-Recession or Pre-Banking-Collapse Peak Activity

That Said, Manufacturing, Durable Goods Orders and Freight Activity, All Are in Record Non-Expansion, Showing a Deepening, New Recession

Twelve Months Real New Orders for Durable Goods to November 2019 Was Down Year-to-Year Versus the 12 Months to November 2018, Both Before and After Consideration of Volatile Commercial Aircraft Orders

Still Shy by 20% to 50% of Ever Recovering Pre-Recession Peak Activity, Elements of the Housing Sector Continue to Show Signs of Low-Level Stabilization

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ShadowStats Commentaries

- The *Daily Update* posts as needed, on the *ShadowStats* home page: <u>www.ShadowStats.com</u>, right-hand column, providing initial coverage of all major U.S. economic reporting, within two-to-three hours of headline publication, as well as coverage of unusual financial-market or political developments.
- The *Bullet Edition* publishes each weekend, providing *ShadowStats* primary coverage of the past week's unfolding activity, reviewing economic releases, financial-market, systemic and political developments. [Next planned releases: *Bullet Editions No. 18* (likely December 29th) and *No. 19* (likely January 5th) will a concentrate on reviewing 2019 and a looking ahead to 2020, on the Economy, the Markets and related Federal Reserve policy, as sampled in today's *Overview. No. 19* also will cover the next major economic release, Construction Spending of January 3rd.]
- The *Flash Update*, interspersed with *Bullet Editions*, is limited in scope, highlighting near-term events or developments—usually same- or next-day—with the economy, financial markets, politics, the Federal Reserve or with other news of significance that should be reviewed in advance of the Weekend *Bullet Edition*. [Next: *Flash Update No. 17* (to be determined).]
- **Special Commentaries** should publish every quarter or so, providing a more-comprehensive overview of general, broad economic and financial conditions and trends, such as seen in the recently published **Special Commentary No. 985.**
- Hyperinflation and Consumer Liquidity Watches will supplement irregularly the weekly Bullet
 Edition, covering evolving market and consumer circumstances, otherwise with occasional
 specific data covered directly in the weekly Bullet Editions.
- *Economic Surveys of the General Public* are conducted irregularly and are open to both subscribers and nonsubscribers.
- *Telephone Consulting* is included as part of our regular service. If you have a question or otherwise would like to talk, please call John Williams at (707) 763-5786.

All *Current* and *Earlier ShadowStats Commentaries* (back to 2004) are available in the <u>Archives</u> (click on *All Commentaries*, then *List Commentaries*) in the left-hand column of the *ShadowStats Home Page*.

ShadowStats Broad General Outlook Has Not Changed. ShadowStats' Recession Forecast remains in place, with U.S. Economic activity in a deepening downturn, as detailed in the recently published <u>Special Commentary No. 985</u>. Complicated and intensified by deteriorating domestic political and liquidity circumstances, the ShadowStats broad outlook in the weeks and months ahead remains for:

- A rapidly intensifying U.S. economic downturn, reflected in
- Mounting selling pressure on the U.S. dollar, against currencies such as the Swiss Franc,
- Continued flight to safety in precious metals, with upside pressures on gold and silver prices, and
- Increasingly high risk of extraordinarily heavy stock-market selling.

Your comments and suggestions are invited. Always happy to discuss what is happening.

Best Wishes for a Most Joyous and Merry Christmas, a Happy Chanukah and for a Happy, Healthy and Most Prosperous New Year!

— John Williams (707) 763-5786, johnwilliams@shadowstats.com

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[The *Overview* section begins on the next page.]

Overview

FOMC's Quantitative Easing and Interest Rate Moves Can Boost or Kill the Economy

Expanded "Quantitative Easing" and Further Interest Rate Cuts Are Needed

Key Economic Indicators Signal Faltering Activity and Unfolding Recession

Risk of Extreme Financial-Market and Political Instabilities Favor Holding Precious Metals

Looking Back at 2019 and Ahead to 2020. This *Overview Section* looks at some of the areas that will be covered in the *Review and Preview Bullet Editions* (*Bullet Editions No. 18* and *No. 19*) planned for the next two weekends, covering:

- More-Aggressive Stimulus Will Be Needed from the Fed
- The Broad Economic Outlook Continues to Turn Down in an Unfolding Recession
- Financial-Market Instabilities Should Escalate
- Good Time to Hold Some Physical Gold As a Safe Haven

Today's second section, covering the *Latest Economic Numbers*, begins with the Third-Estimate of Third-Quarter 2019 GDP, which revised negligibly from its prior reporting. Related, updated *Graphs* 7 to 23 largely are indistinguishable from the prior plots in *Special Commentary No. 985*. *No. 985* also detailed the unusual nature of the data disruptions and distortions that came out of last year's Government Shutdown, and the major downside benchmark revisions to key series pending in the year ahead, particularly including the July 30, 2020 GDP annual benchmarking. Eventually, such should lead to the formal recognition of a recession that began in Fourth-Quarter 2018 (November).

The latest headline details on November Industrial Production, the CASSTM Freight Index and New Orders for Durable Goods, updated in *Graphs 24* to 47 all are signaling a deepening economic downturn. The Housing Starts and Home Sales coverage, reflected in *Graphs 48* to 57 shows some bottoming and low-level uptrend continuing in series that remain roughly 20% to 50% shy of ever recovering their pre-recession peak activity.

FOMC Quantitative Easing and Interest Rate Policies Do Have Impact

More-Aggressive Stimulus Will Be Needed from the Fed. The FOMC's renewed "Not Quantitative Easing" has boosted the level of the Monetary Base in recent months, as well as having accelerated an upswing in annual change in the Monetary Base off near-historic lows, effectively to zero. A renewed significant increase in the Monetary Base would boost the economy, as would a renewed, further decline in the targeted Federal Funds Rate. Continued actions are needed, as will be suggested by some of the new economic headlines covered later.

Through severe mismanagement and lack of oversight on the part of the Board of Governors of the Federal Reserve System, the U.S. Banking System collapsed in 2007/2008, triggering what became known as the Great Recession. Neither the Manufacturing nor the Construction Industry has come close to recovering pre-Great Recession activity, leaving Main Street U.S.A. moribund as opposed to booming. Fed Chairman Powel and those who sit on the Federal Reserve's Federal Open Market Committee (FOMC) should be well aware of that, especially with a new, related downturn already underway, promising likely further pain for Main Street.

These areas will be detailed in the year-end/first-of-year *Commentaries* over the next two weekends, with a couple of thoughts put forth here, before getting into last week's and today's headline economic activity. The headline "perfect" economy in hand is anything but, it is simply Wall Street's political hyperbole. It is not for lack of trying by the Administration, it is simply an artefact of a failed Central and Crony Banking System that needs to be overhauled (see the discussions in *Special Commentary No. 983-B* and *Special Commentary No. 985*).

While record-low unemployment is what headlines show, related labor market stress levels are more consistent with a recession, while payroll employment and real earnings growth are more common to a nascent recession, Stresses from FOMC's 2018 liquidity tightening helped trigger the unfolding downturn . Now the Fed has begun to cut rates and to reverse its liquidity tightening with non-"QE" quantitative easing that could have some positive impact around the 2020 election, but more is needed.

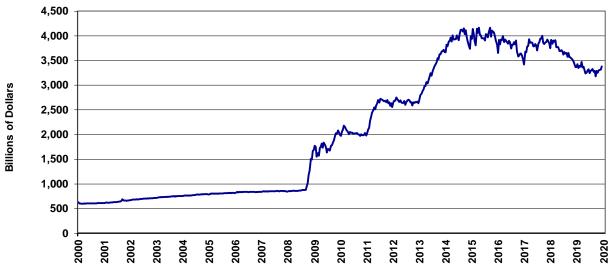
As will be carefully detailed in the weeks ahead, downtrends in both the level and annual growth in the Monetary Base *Graphs 1* and 2 in 2014 into 2017, and in 2018 into 2019 run in tandem with the slowing economy seen in *Graphs 3* to 6 and with other series plotted in the later *Latest Economic Numbers* section. This circumstance appears to be a dominant factor in driving the post-Banking System Bailout Economy. With the year-to-year change in the Monetary Base having just regained 0% from the crushing downside, continued upside movement there could be placing some upside pressure on elements of the economic activity by the end of 2020. In combination, cutting the targeted Federal Funds Rate at the same time, again, should help to push business activity higher.

The FOMC, however, may have to recognize first that the economy is not in sustainable moderate economic growth.

[Graphs 1 and 2 follow on the next page.]

Graph 1: FOMC "Not QE2" Boosts the Monetary Base,





Graph 2: FOMC - Monetary Base Annual Growth Rebounds to Zero

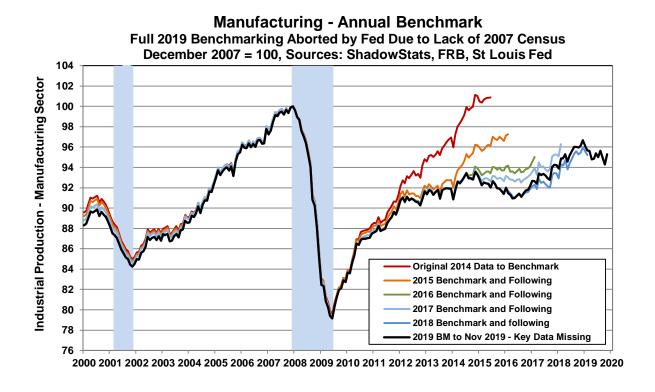
St. Louis Fed Adjusted Monetary Base - Bi-Weekly Year-to-Year Percent Change December 29, 1999 to December 18, 2019 Seasonally-Adjusted [ShadowStats, St. Louis Fed]



Deepening Recession

The Broad Economic Outlook Continues to Turn Down in an Unfolding Recession. Detailed in Section I: Shadows of an Unfolding Economic Recession (see the discussion beginning on page 10 of Special Commentary No. 985), a 2014 to 2016 Recession appears to have been missed, due to much delayed, catch up benchmark revisions to the manufacturing sector (also a current issue), as reflected in Graph 3. Also discussed there were the prospects of adding a couple of new recession bars in 2014-2016 and the November 2018 to date period, plotted here with Graphs 4 to 6 (again see the discussion in No. 985). Although the alternate recession cycles appear valid, particularly with the Industrial Production (Manufacturing and Mining), New Orders for Durable Goods and the CASS Freight Index, the extra recession bars are plotted only in this section. Consider later Graphs 31, 33, 40, 41, 46 and 47 as partial evidence of an unfolding recession

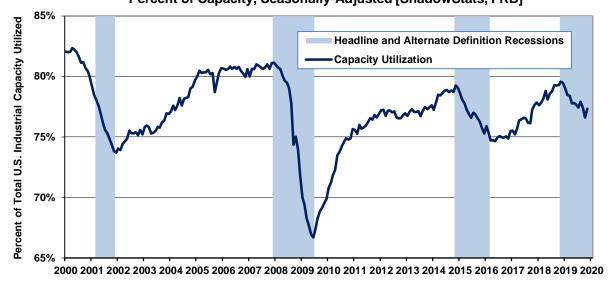
Graph 3: How the 2014 to 2016 Recession Was Missed



[Graphs 4 to 6 begin on the next page.]

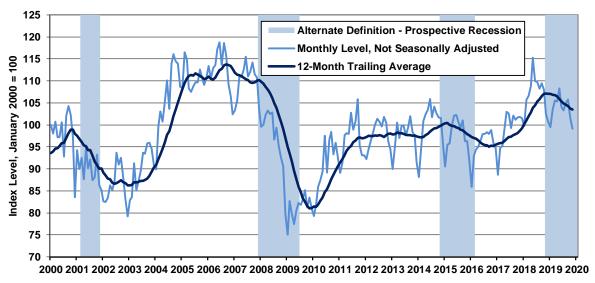
Graph 4: Capacity Utilization and Alternate Recessions

Capacity Utilization: Total U.S. Industry to November 2019 With An Alternate Recession Definition Percent of Capacity, Seasonally-Adjusted [ShadowStats, FRB]

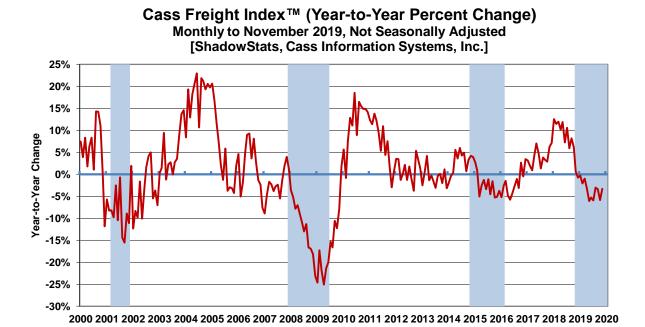


Graph 5: CASS Freight Index Level and Alternate Recessions

Cass Freight Index[™] (Jan 2000 = 100) To November 2019, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



Graph 6: CASS Freight Index, Year-to-Year Change and Alternate Recessions



Stock-Market Versus Gold and Silver

One Year Ago, the Stock Market Crashed. Where the various major U.S. Stock Indices rallied into Third-Quarter 2018 hitting historic highs, the FOMC raising interest rates in December, with an indication of further rate hikes in 2019, crashed the stock market into December 24, 2018, to be rescued early in 2019 by the "Plunge Protection Team" and by the FOMC backing off further rate hikes. *Table I* on the following page reflects the various prices or measures of investment vehicles against that turmoil. What it shows is that investments in physical gold and silver at the time of the 2018 stock-market highs has outperformed the subsequent stock market gains through to today's (December 23rd) all-time high stock-market levels.

[Stock Market Values Versus Gold and Silver follows on the next page.]

Table I: Stock Indices Versus Various Financial Indicators

December 23, 2019 Stock-Market Highs Versus Highs of Third-Quarter 2018, the Interim Trough of December 24, 2018, and Against Various Financial Indicators

	I	II	Ш	IV	V	VI
	(A)	(B)	(B) vs. (A)	(C)	(C) vs. (B)	(C) vs. (A)
	Stock Indices					
	All-Time	Low Close	Low Close	All-Time	Dec 23 2019	Dec 23 2019
	High Close*	Dec 24 2018	Dec 24 2018	High Close	vs. Low Close	vs. High Close
Stock Market Index	Aug-Oct 2018	Trough**	vs. High*	Dec 23 2019	Dec 24 2018	Aug-Oct 2018
Dow Jones Industrial Average	26828.39	21792.20	-18.77%	28551.53	31.02%	6.42%
S&P 500	2930.75	2351.10	-19.78%	3224.01	37.13%	10.01%
S&P 500 - Total Return	5794.72	4672.66	-19.36%	6537.40	39.91%	12.82%
NASDAQ Composite	8109.69	6192.92	-23.64%	8945.65	44.45%	10.31%
			Dec 24 2018		Dec 23 2019	Dec 23 2019
	Sep 2018	Dec 24 2018	Change vs.	Dec 23 2019	Change vs.	Change vs.
Financial Indicator	Average	Close**	Sep 2018	Close	Dec 24 2018	Sep 2018
Gold London PM Fix \$/Oz	1198.47	1275.85	6.46%	1489.50	16.75%	24.28%
Silver London PM Fix \$/Oz	14.26	15.00	5.17%	17.50	16.67%	22.70%
Brent Crude Oil \$/Bbl	78.89	51.93	-34.17%	65.60	26.32%	-16.85%
Trade-Weighted Dollar (1)	90.00	92.12	2.35%	91.90	-0.23%	2.11%
Financial-Weighted Dollar (2)	57.86	58.90	1.79%	59.05	0.26%	2.06%
Effective Fed Funds Rate (3)	1.95%	2.41%	0.46%	1.55%	-0.86%	-0.40%
Three-Month T-Bill Rate (3,4)	2.17%	2.43%	0.26%	1.67%	-0.76%	-0.50%
10-Year Bond Yield (3,4)	3.15%	2.51%	-0.64%	1.92%	-0.59%	-1.23%

^{*} All-time high closes (3q2018): DJIA - Oct 3 2018, S&P 500 (and S&P 500 TR, dividends reinvested) - Sep 20 2018, NASDAQ - Aug 29, 2018.

Sources: St. Louis Fed, Wall Street Journal, Dow Jones Indexes, Finance.Yahoo.com/lookup, Kitco, DOE, ShadowStats.com.

^{**} Or last close prior to Dec 24 2018.

⁽¹⁾ The TWD (Federal Reserve) weights the U.S. Dollar against major currencies based on trade volume in goods.

⁽²⁾ FWD (ShadowStats) weights USD against currency trading volume (includes Chinese Yuan, excluded in TWD).

⁽³⁾ Change is indicated as the percentage point difference in yield.

⁽⁴⁾ Constant maturity yield.

The Latest Economic Numbers

Third-Quarter Gross Domestic Product and Related Series

Negligible "Final" Revisions

Negligible Revisions to the Third Estimate of Third-Quarter GDP; Final Sales Were a Bit Stronger, GDI a Bit Weaker. The "final" estimate (still subject to benchmark revisions) of Third-Quarter 2019 Real Gross Domestic Product held effectively unrevised at 2.10%, as widely expected. Reported December 20th by the Bureau of Economic Analysis (BEA), Third-Quarter 2019 annualized real GDP effectively was "unrevised" at 2.10% versus 2.12%, and against 2.01% in Second-Quarter 2019, while Third-Quarter 2019 "Final Sales," GDP net of Inventory Change, revised to 2.13% from 1.95%, still down from 2.92% in Second-Quarter 2019.

The second estimate of Third-Quarter 2019 Gross Domestic Income (GDI), the theoretical income-side equivalent to the GDP's consumption side, revised lower to 2.13%, versus an initial 2.39%, which had been heavily distorted by a sharp downside revision to 0.87% (previously 1.82%) in Second-Quarter 2019.

The second estimate of Third-Quarter 2019 Gross National Product (GNP), GDP net of Factor Income (the trade balance in interest and dividend payments) held at 2.20% versus its initial 2.19%, still down from 2.78% in Second-Quarter 2019.

Summary detail of the headline Third-Quarter 2019 GDP, GDI and GNP activity, as well as the ShadowStats "alternate" measures are reflected in *Table II*.

Ensuing *Graphs* 7 to 23 follow *Table II* and, again, are negligibly revised from their prior versions published in *Special Commentary No.* 985.

[Table II and Graphs 7 to 23 begin on the next page.]

Table II: Gross Domestic Product and Related Component Contributions 3q2018 to 3q2019

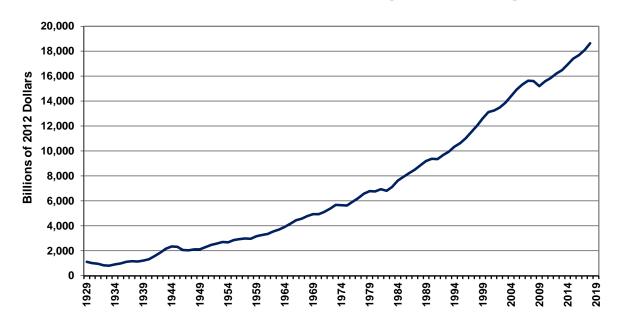
Annualized Quarterly Real Growth in Headline Gross Domestic Product
Benchmark Revised Third-Quarter 2018 to First-Quarter 2019 and
"Final" Second-Quarter and Third-Quarter 2019 Estimates
Growth Contribution by Consumption and Product Sector

GDP COMPONENT GROWTH CONTRIBUTION BY SECTOR	Third-Quarter 2018		Fourth-Quarter 2018		First-Quarter 2019		Second- Quarter	Third-Quarter 2019		
	Old	Revised	Old	Revised	Old	Revised	2019	First	Second	
	"Final"	"Final"	"Final"	"Final"	"Final"	"Final"	"Final"		Estimate	"Final"
ECONOMIC SECTOR										
Personal Consumption										
- Goods	0.90%	0.75%	0.54%	0.33%	0.15%	0.32%	1.74%	1.14%	1.17%	1.09%
Motor Vehicles	-0.05%	0.01%	0.20%	0.07%	-0.46%	-0.27%	0.37%	0.02%	0.07%	0.06%
- Services	1.47%	1.59%	1.12%	0.65%	0.48%	0.46%	1.29%	0.79%	0.80%	1.02%
Gross Private Domestic Investment										
- Fixed Investment	0.21%	0.13%	0.54%	0.46%	0.53%	0.56%	-0.25%	-0.22%	-0.18%	-0.14%
Residential	-0.14%	-0.16%	-0.18%	-0.18%	-0.08%	-0.04%	-0.11%	0.18%	0.18%	0.17%
- Change in Private Inventories	2.33%	2.14%	0.11%	0.07%	0.55%	0.53%	-0.91%	-0.05%	0.17%	-0.03%
Net Exports of Goods and Services	-1.99%	-2.05%	-0.08%	-0.35%	0.94%	0.73%	-0.68%	-0.08%	-0.11%	-0.14%
Government Consumption	0.44%	0.36%	-0.07%	-0.07%	0.48%	0.50%	0.82%	0.35%	0.28%	0.30%
GDP ANNUALIZED REAL GROWTH	3.36%	2.93%	2.17%	1.09%	3.13%	3.10%	2.01%	1.92%	2.12%	2.10%
Final Sales, GDP Less Inventories	1.03%	0.79%	2.06%	1.02%	2.58%	2.57%	2.92%		1.95%	2.13%
PRODUCT SECTOR										
PRODUCT SECTOR										
Goods	1.76%	1.41%	1.66%	1.39%	2.11%	2.12%	0.62%	1.35%	1.51%	1.20%
Services	1.77%	1.73%	0.99%	0.37%	0.56%	0.66%	1.66%	0.91%	0.90%	1.11%
Structures	-0.17%	-0.21%	-0.48%	-0.67%	0.46%	0.32%	-0.26%	-0.33%	-0.29%	-0.21%
GDP ANNUALIZED REAL GROWTH	3.36%	2.93%	2.17%	1.09%	3.13%	3.10%	2.01%	1.92%	2.12%	2.10%
			SUPPLE	MENTAL				Ų.		
Annualized Quart					_			ii .		
Gross Domestic Product (GDP)	3.36%	2.93%	2.17%	1.09%	3.13%	3.10%	2.01%			2.10%
Gross Domestic Income (GDI)	4.56%	3.28%	0.52%	0.78%	1.00%	3.24%	r0.87%		*2.39%	2.13%
Gross National Product (GNP)	3.05%	3.00%	2.12%	0.68%	3.16%	3.09%	2.78%		2.19%	2.20%
ShadowStats Corrected GDP**	1.27%	0.84%	0.10%	-0.96%	1.04%	1.01%	-0.05%	-0.14%	0.06%	0.04%
Implicit Price Deflator (IPD) Inflation	1.51%	1.78%	1.86%	1.78%	0.64%	0.78%	2.59%	1.57%	1.68%	1.71%
			inge and F					1	0.000/	0.070/
Gross Domestic Product (GDP)	3.00%	3.13%	2.97%	2.52%	3.20%	2.65%	2.28%		2.08%	2.07%
Gross Domestic Income (GDI)	2.69%	2.83%	2.45%	2.34%	1.73%	2.00%	r2.04%		1.81%	1.75%
Gross National Product (GNP) ShadowStats Corrected GDP**	2.96% 0.92%	3.17% 1. 05 %	2.85% 0.89%	2.41%	3.09% 1.11%	2.47% 0.58%	2.38% 0.21%	-0.04%	2.18% 0.01%	2.19% 0.01%
Implicit Price Deflator (IPD) Inflation	2.39%	2.59%	2.17%	0.44% 2.34%	1.83%	1.94%	1.73%	1.68%	1.70%	1.70%
implicit race behator (irb) illiation						itial 3q2019				

Gross Domestic Product (GDP), Third Estimate, Third-Quarter 2019

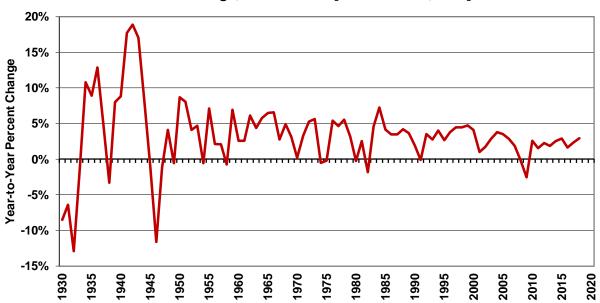
Graph 7: Headline Real GDP Level 1929 to 2018

Annual Real Gross Domestic Product - Benchmarked Level in Billions of 2012 Dollars, 1929 to 2018 [ShadowStats, BEA]

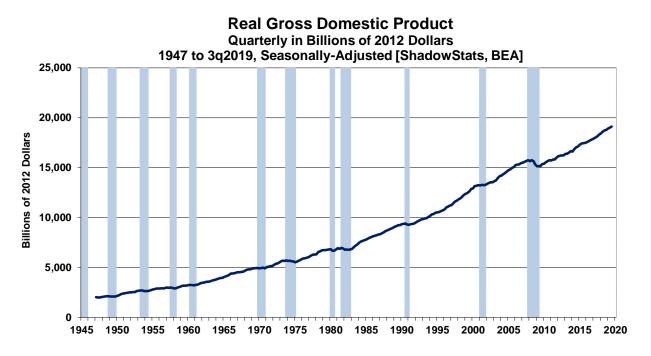


Graph 8: Headline Real GDP Annual Percent Change 1939 to 2018

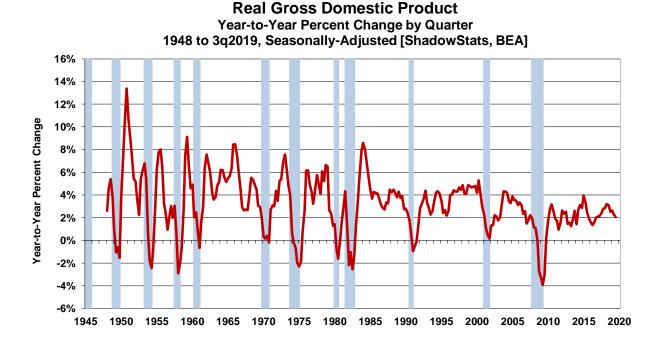
Annual Real Gross Domestic Product (GDP) Percent Change, 1930 to 2018 [ShadowStats, BEA]



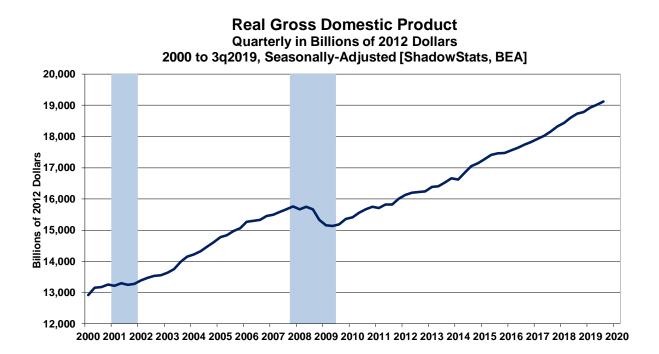
Graph 9: Headline Real Quarterly GDP 1947 to 3q2019



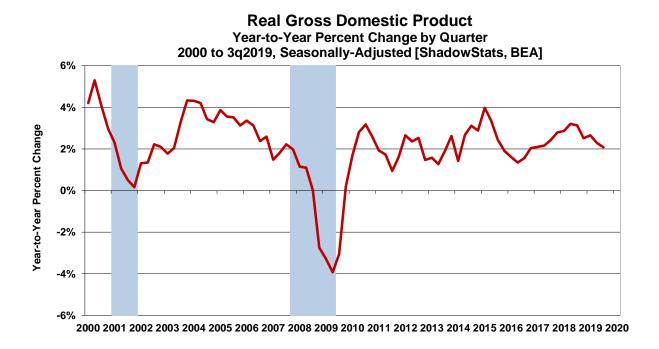
Graph 10: Headline Real GDP 1948 to 3q2019, Year-to-Year Percent Change by Quarter



Graph 11: Real GDP, 2000 to Third-Quarter 2019

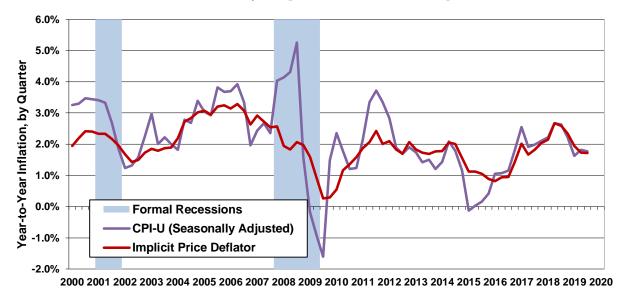


Graph 12: Real GDP, 2000 to Third-Quarter 2019, Year-to-Year Change



Graph 13: Annual Inflation - GDP Implicit Price Deflator vs. CPI-U, 2000 to Third-Quarter 2019

GDP Implicit Price Deflator vs. CPI-U, Annual Inflation Seasonally-Adjusted, Year-to-Year Percent Change 2000 to 3q2019 [ShadowStats, BEA, BLS]



[Detail on the Gross National Product and the Gross Domestic Income begin on the next page.]

Second-Estimate, Third-Quarter 2019 Gross National Product (GNP)

Graph 14: Real GNP, 2000 to Third-Quarter 2019

Third-Quarter 2019 Real Gross National Product Trillions of Chained (2012) Dollars Seasonally-Adjusted [ShadowStats, BEA]



Graph 15: Real GNP, 2000 to Third-Quarter 2019, Year-to-Year Change

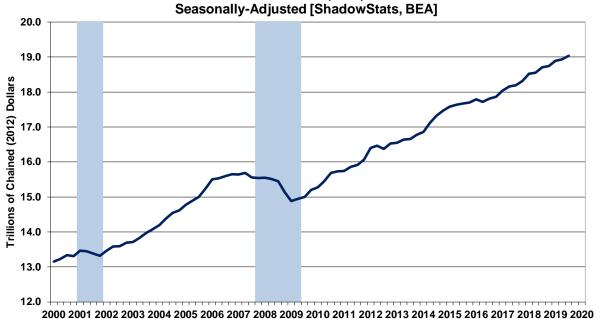
Third-Quarter 2019 Real Gross National Product Year-to-Year Change, 1q2000 to 3q2019 [ShadowStats, BEA]



Second-Estimate, Third-Quarter 2019 Gross Domestic Income (GDI)

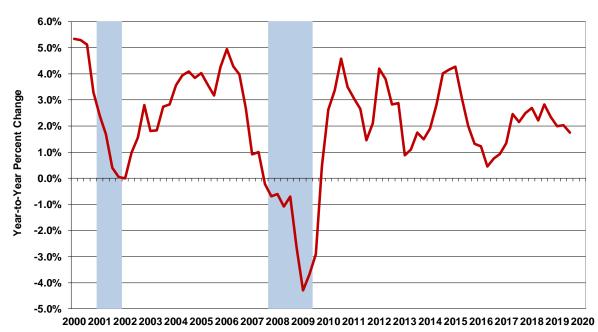
Graph 16: Real GDI, 2000 to Third-Quarter 2019

Third-Quarter 2019 Real Gross Domestic Income Trillions of Chained (2012) Dollars Seasonally-Adjusted [ShadowStats, BEA]



Graph 17: Real GDI, 2000 to Third-Quarter 2019, Year-to-Year Change

Third-Quarter 2019 Real Gross Domestic Income Year-to-Year Change, 1q2000 to 3q2019 [ShadowStats, BEA]



Third-Estimate, Third-Quarter 2019 ShadowStats Alternate GDP

Real GDP Shows No Economic Expansion, When Corrected for Understated Inflation

While Headline Real GDP Has Rallied by 26.4% Off Its Fourth-Quarter 2007 Pre-Recession Peak, No Other Series Has. *Graphs 11* to 12 plot the headline real quarterly GDP as published by the Bureau of Economic Analysis (BEA). Discussed in *Special Commentary No. 983-B*, *Section 4: Underlying Reality* (page 35), headline real GDP growth has been systematically overstated, through the recasting and understatement of headline GDP inflation. ShadowStats regularly restates the GDP series for the gimmicked inflation understatement of about two-percent, and has updated those graphs and calculations through third-quarter 2019 GDP (see *Graphs 18* to 23). See *Special Commentary No. 968-Extended* for full background detail.

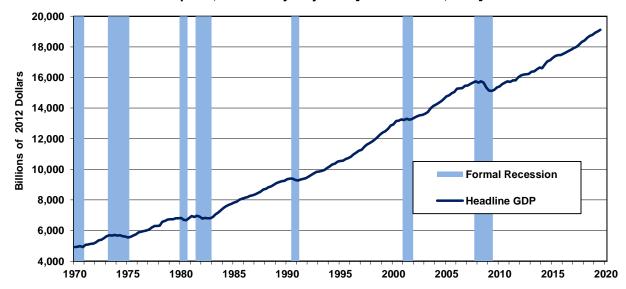
Updated from <u>Special Commentary No. 983-B</u>, headline, real Third-Quarter 2019 GDP has fully recovered its Fourth-Quarter 2007 pre-recession peak, and has expanded beyond that peak by 26.4%, growing at an annualized quarterly pace of 2.1%. In contrast, the ShadowStats Corrected-Inflation Measure, which shows a pattern of economic growth paralleling the Manufacturing Sector, remains shy of recovering its Fourth-Quarter 2007 peak by 4.6% (-4.6%), although off its trough by 2.4%, with annualized real Third-Quarter 2019 and year-to-year change of 0.0%.

[Graphs 18 to 23 begin on the Next Page]

Underlying Economic Reality – Alternate Real GDP Using Corrected Inflation The plots in Graphs 19 and 21 to 23 reflect GDP deflated by the Implicit Price Deflator corrected for understated annual inflation. For background, see *Special Commentary No. 983-B* and *Special Commentary No. 968-Extended*.

Graph 18: Real GDP 1970 to Third-Quarter 2019

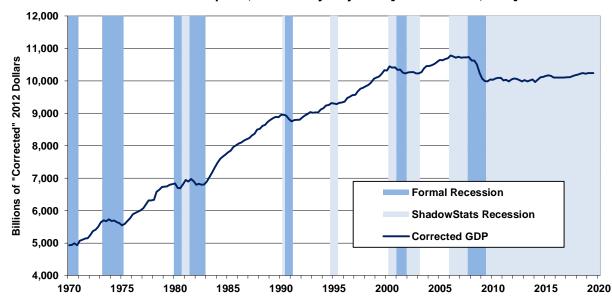
Headline Real Gross Domestic Product Nominal GDP Deflated by Implicit Price Deflator To 3q2019, Seasonally-Adjusted [ShadowStats, BEA]



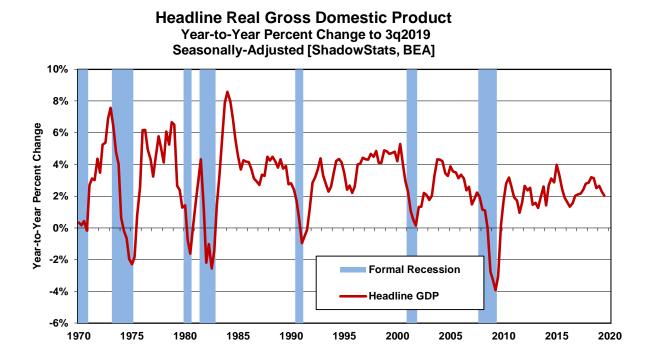
Graph 19: ShadowStats Alternate Real GDP, Year-to-Year Change, 1970 to Third-Quarter 2019

Corrected Real Gross Domestic Product

Nominal GDP Deflated by Implicit Price Deflator
Adjusted for the Understatement of Annual Inflation
To Third-Estimate 3q2019, Seasonally-Adjusted [ShadowStats, BEA]



Graph 20: Real GDP 1970 to Third-Quarter 2019, Year-to-Year Percent Change



Graph 21: ShadowStats Alternate Real GDP 1970 to Third-Quarter 2019, Year-to-Year Percent Change

Year-to-Year Percent Change, to Third-Estimate 3q2019, Seasonally-Adjusted [ShadowStats, BEA] Formal Recession ShadowStats Recession — Corrected GDP 2% -2% -4%

Corrected Real Gross Domestic Product Adjusted for Understatement of Annual Inflation

1990

1995

2000

2005

2010

2015

2020

1985

-6%

-8% — 1970

1975

1980

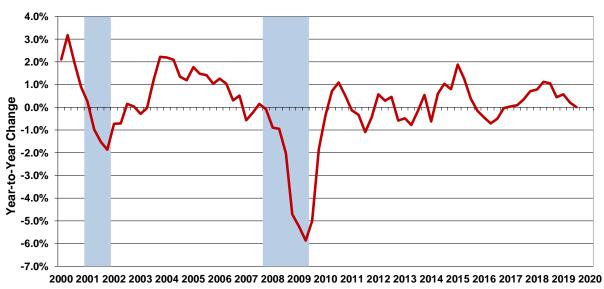
Graph 22: ShadowStats-Corrected Real GDP, 2000 to Third-Quarter 2019

Corrected-Inflation Real Gross Domestic Product Nominal GDP Deflated by Implicit Price Deflator Corrected for Roughly Two-Percentage Point Understatement of Annual Inflation 1q2000 to 3q2019, Seasonally-Adjusted [ShadowStats, BEA]



Graph 23: ShadowStats Corrected Real GDP, Year-to-Year Change, 2000 to Third-Quarter 2019

Corrected-Inflation GDP, Year-to-Year Percent Change 1q2000 to 3q2019, Seasonally-Adjusted [ShadowStats, BEA]

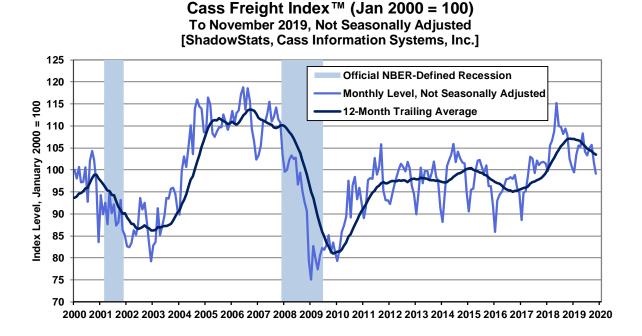


Industrial Production and the CASS Freight Index, Durable Goods Orders

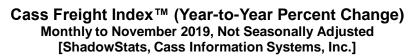
November 2019 CASS Freight Index Twelve-Month Moving Average and Year-to-Year Change Both Declined for 12th Stright Month. (See the updated reporting at https://www.cassinfo.com/freight-audit-payment/cass-transportation-indexes/november-2019, as published December 18th). Following a year-to-year drop of 5.9% (-5.9%) in October 2019, November activity was down by 3.3% (-3.3%), possibly reflecting minimal relative relief from the end of the General Motors Auto Strike, otherwise still paralleling the pattern of annual declines seen at the onset of the Great Recession.

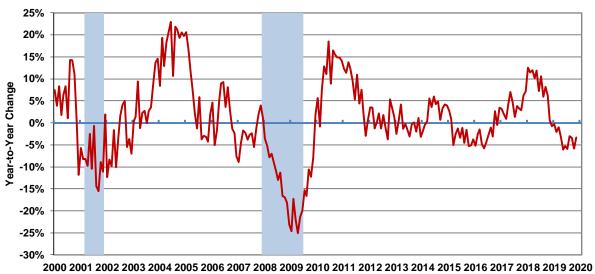
Separately, the Index's 12-month moving average declined month-to-month for its twelfth straight month. Those year-to-year and 12-month-moving-average metrics neutralize seasonality in this unadjusted series. ShadowStats regularly follows and analyzes the CASS Index as a highest-quality coincident/leading indicator of underlying economic reality. We thank CASS for their permission to graph and to use their numbers in our Commentaries.

Graph 24: CASS Freight Index, 2000 to November 2019



Graph 25: CASS Freight Index, Year-to-Year Change, 2000 to November 2019





Industrial Production:

- Irrespective of Any Auto Strike Impact, November Aggregate Industrial Production and Manufacturing Activity Bounced on Top of Prior Months' Downside Revisions and Renewed GM Production.
- Yet, Production and Manufacturing Year-to-Year Contractions Continued for the Third Straight Month.
- November Auto Assemblies Were Down Year-to-Year for the Fourth Straight Month, Despite the Strike's End.
- Collapse in Mining Activity (Oil and Gas Drilling) Intensified.
- November 2019 Manufacturing held 4.7% (-4.7%) shy of ever recovering its December 2007 pre-recession peak. In the 101-year history of series, that is a record full twelve years, 144 consecutive months, and counting, of economic non-expansions (never having recovered its pre-recession high).
- Even so, a new Recession is Unfolding.

November 2019 Industrial Production Showed the Series and Its Components on Track for Across-the-Board Quarterly Contractions, and Annual Contractions or Collapsing Annual Activity.

Reported by the Federal Reserve Board on December 17th, both of its meaningful sectors, Manufacturing and Mining continued in deepening recession, while the weather-generated random volatility in its Utilities sector also was in decline.

Contrary to FOMC assurances of sustainable moderate economic growth, and despite post-strike resumption of auto production at General Motors, total automobile assemblies and aggregate annual growth patterns, as well as quarterly growth trends remained negative year-to-year. With the exception of Mining, which showed annual growth having collapsed to 2.0% in November 2019, from a 15.1% near-term peak in January 2019, the other major sectors were in annual decline, down 0.8% (-0.8%) for Manufacturing, down a random 4.1% (-4.1%) in Utilities, all combining into an annual drop of 0.8% (-0.8%) in aggregate November 2019 Industrial Production.

Reflecting November's activity, aggregate Industrial Production and its components of Manufacturing, Mining and Utilities all also were on an early track for Fourth-Quarter 2019 quarterly contractions, which should flow through to the quarterly Fourth-Quarter 2019 GDP. Quarterly Manufacturing activity was dampened by the auto strike, but it still was down net of same. Again, Mining continued in a state of collapse tied to Oil and Gas exploration. Of relatively negligible long-range impact, Utilities were contracting due to the random effects of weather.

[Table III of Industrial Production detail, and a full set of related graphs begin on the next page.]

Table III: Growth and Revision Details on Major Industrial Production Sectors, May 2019 to November 2019

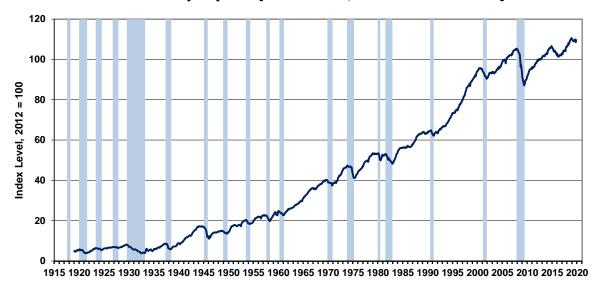
Index of Industrial Production (IIP) and Major Sectors to November 2019 by Month, 2012 = 100.000 for All Indices								
Measure Weight Nov'19 Oct Sep Aug Jul Jun May								
IIP INDEX	100.0%	109.677	108.489	109.456	109.939	109.106	109.277	109.220
- Prior			108.671	109.594	109.927	109.118	109.268	109.226
Mo/Mo		1.10%	-0.88%	-0.44%	0.76%	-0.16%	0.05%	0.22%
- Prior			-0.84%	-0.30%	0.74%	-0.14%	0.04%	0.22%
Yr/Yr		-0.75%	-1.30%	-0.20%	0.38%	0.42%	1.02%	1.73%
- Prior			-1.13%	-0.07%	0.37%	0.43%	1.01%	1.73%
Manufacturing	75.0%	104.906	103.788	104.508	105.271	104.585	104.998	104.413
- Prior			104.049	104.707	105.247	104.625	104.984	104.413
Mo/Mo		1.08%	-0.69%	-0.72%	0.66%	-0.39%	0.56%	0.08%
- Prior	`		-0.63%	-0.51%	0.59%	-0.34%	0.55%	0.08%
Yr/Yr		-0.84%	-1.73%	-1.12%	-0.38%	-0.61%	0.19%	0.32%
- Prior			-1.48%	-0.93%	-0.41%	-0.57%	0.18%	0.32%
Consumer Goods*		106.009	103.834	104.713	105.377	105.542	105.546	105.04
- Prior			104.393	105.221	105.281	105.524	105.531	105.043
Mo/Mo		2.09%	-0.84%	-0.63%	-0.16%	0.00%	0.48%	0.56%
- Prior			-0.79%	-0.06%	-0.23%	-0.01%	0.47%	0.56%
Yr/Yr		-1.26%	-2.68%	-1.71%	-1.00%	-0.41%	-0.23%	0.08%
- Prior			-2.16%	-1.24%	-1.10%	-0.43%	-0.24%	0.08%
Mining	14.6%	132.303	132.513	133.605	133.970	130.792	133.611	133.08
- Prior			132.098	133.008	134.051	130.618	133.624	133.08
Mo/Mo		-0.16%	-0.82%	-0.27%	2.43%	-2.11%	0.39%	-0.25%
- Prior			-0.68%	-0.78%	2.63%	-2.25%	0.41%	-0.25%
Yr/Yr		2.01%	3.02%	4.00%	5.37%	5.15%	8.40%	10.18%
- Prior			2.70%	3.54%	5.43%	5.01%	8.41%	10.18%
Utilities	10.4%	106.621	103.596	106.106	104.617	105.273	100.866	105.23
- Prior			103.812	106.554	104.597	105.273	100.866	105.235
Mo/Mo		2.92%	-2.37%	1.42%	-0.62%	4.37%	-4.15%	1.90%
- Prior			-2.57%	1.87%	-0.64%	4.37%	-4.15%	1.90%
Yr/Yr		-4.09%	-4.31%	0.52%	-1.28%	0.64%	-3.61%	-0.19%
- Prior			-4.11%	0.95%	-1.29%	0.64%	-3.61%	-0.19%

*Consumer Goods was 36.8% of Manufacturing, 27.6% of Industrial Production at 2019 Benchmarking

Sources: Federal Reserve Board, ShadowStats

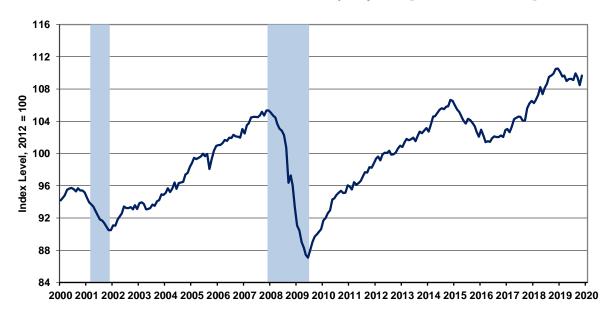
Graph 26: Index of Industrial Production, Full History 1919 to Date

Index of Industrial Production (2012 = 100) 100-Plus Years of Industrial Production Jan 1919 to Nov 2019 Seasonally-Adjusted [ShadowStats, Federal Reserve Board]



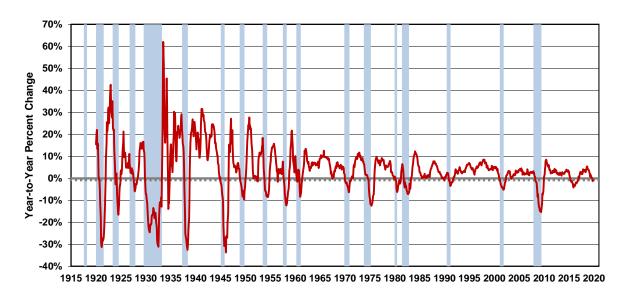
Graph 27: Index of Industrial Production, 2000 to Date

Index of Industrial Production (2012 = 100) Level to November 2019, Seasonally-Adjusted [ShadowStats, FRB]



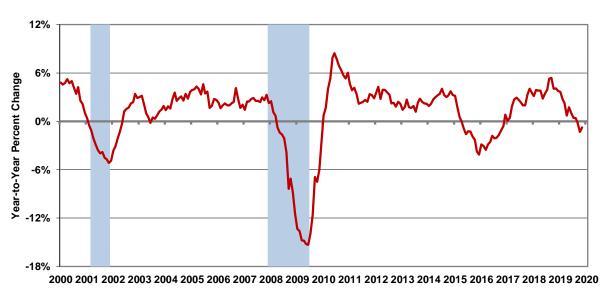
Graph 28: Index of Industrial Production, Year-to-Year Percent Change, Full History 1920 to Date

Industrial Production (Year-to-Year Percent Change) January 1920 to November 2019, Seasonally-Adjusted [ShadowStats, FRB]



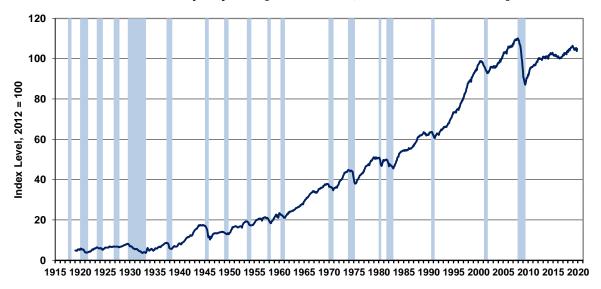
Graph 29: Index of Industrial Production, Year-to-Year Percent Change, 2000 to Date

Industrial Production (Year-to-Year Percent Change) To November 2019, Seasonally-Adjusted [ShadowStats, FRB]



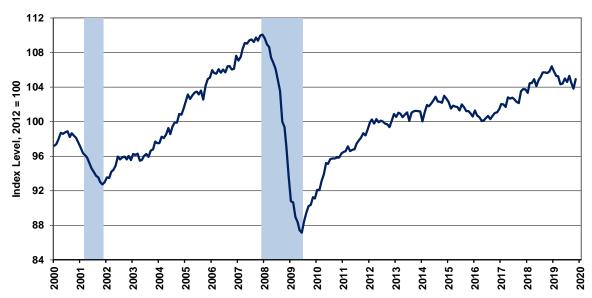
Graph 30: Dominant Manufacturing Sector, Full History 1919 to Date

Industrial Production - Manufacturing Sector (2012 = 100) 100-Plus Years, January 1919 to November 2019 Seasonally-Adjusted [ShadowStats, Federal Reserve Board]



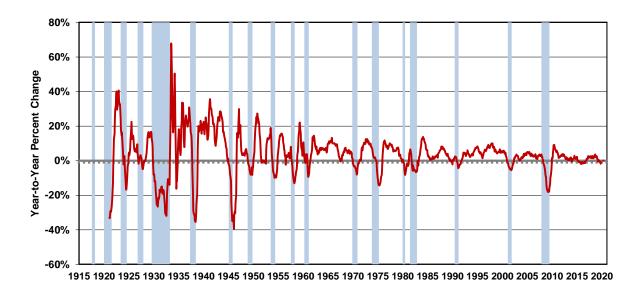
Graph 31: Manufacturing, 2000 to Date

Industrial Production - Manufacturing (SIC) (2012 = 100) Level to November 2019, Seasonally-Adjusted [ShadowStats, FRB]



Graph 32: Dominant Manufacturing Sector, Year-to-Year Change, Full History 1919 to Date

Manufacturing Sector (Year-to-Year Percent Change) January 1920 to November 2019, Seasonally-Adjusted [ShadowStats, FRB]



Graph 33: Manufacturing, Year-to-Year, 2000 to Date

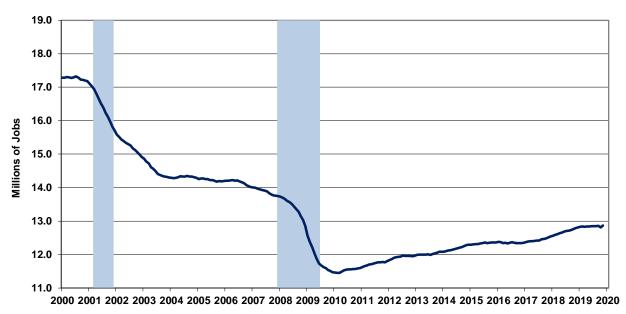
Industrial Production - Manufacturing (Yr-to-Yr Percent Change) To November 2019, Seasonally-Adjusted [ShadowStats, FRB]



Manufacturing Employment (Bureau of Labor Statistics)

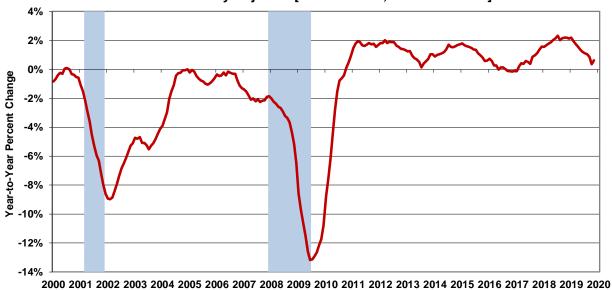
Graph 34: November Manufacturing Employment

Manufacturing Payroll Employment to November 2019 Seasonally-Adjusted [ShadowStats, BLS]

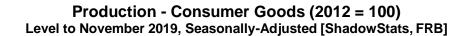


Graph 35: November Manufacturing Employment, Year-to-Year Change

Manufacturing Payroll Employment Year-to-Year Percent Change to November 2019 Seasonally Adjusted [ShadowStats, Census Bureau]



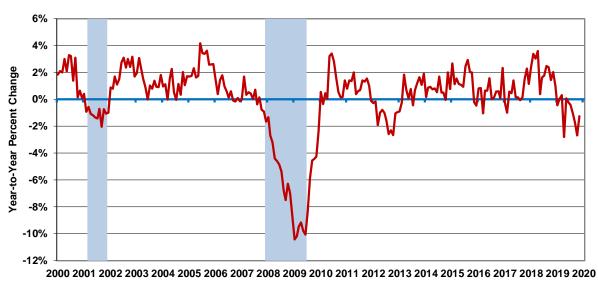
Graph 36: Manufacturing - Consumer Goods, 2000 to Date





Graph 37: Manufacturing - Consumer Goods, Year-to-Year Change, 2000 to Date

Production - Consumer Goods (Year-to-Year Percent Change) To November 2019, Seasonally-Adjusted [ShadowStats, FRB]



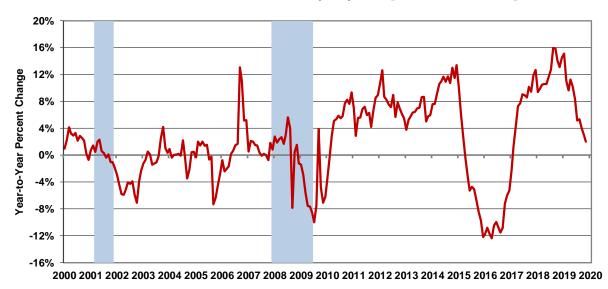
Graph 38: Mining, 2000 to Date





Graph 39: Mining, Year-to-Year, 2000 to Date

Production - Mining (Year-to-Year Percent Change) To November 2019, Seasonally-Adjusted [ShadowStats, FRB]



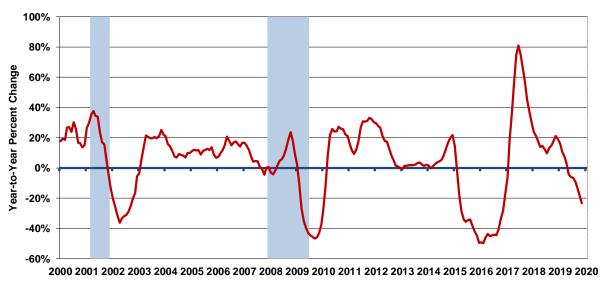
Graph 40: Mining - Oil and Gas Drilling, 2000 to Date

Mining - Drilling for Oil & Gas (2012 = 100)
Level to November 2019, Seasonally-Adjusted [ShadowStats, FRB]

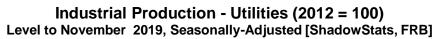


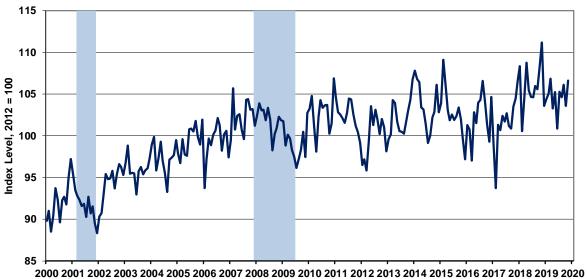
Graph 41: Mining - Oil and Gas Drilling, Year-to-Year Change, 2000 to Date

Drilling for Oil & Gas (Year-to-Year Percent Change) To November 2019, Seasonally-Adjusted [ShadowStats, FRB]



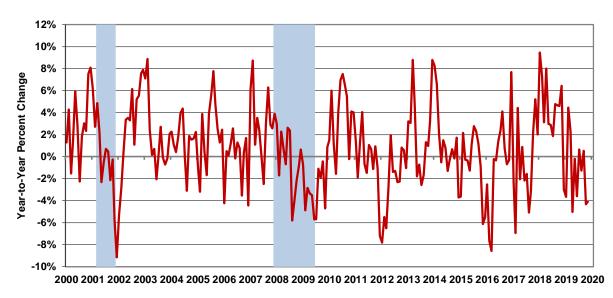
Graph 42: Utilities, 2000 to Date





Graph 43: Utilities, Year-to-Year, 2000 to Date

Production - Utilities (Year-to-Year Percent Change) To November 2019, Seasonally-Adjusted [ShadowStats, FRB]



New Orders for Durable Goods

Deepening Recession - Twelve Months of Real New Orders for Durable Goods to November 2019 Was Down Year-to-Year, Versus 12 Months to November 2018, Both Before and After Consideration of Volatile Commercial Aircraft Orders.

November 2019 New Orders for Durable Goods Continued to Collapse Month-to-Month and Year-to-Year, Both Before and After Consideration of Inflation and Volatile Commercial Aircraft Orders. As reported by the Census Bureau on December 23rd, November New Orders for Durable Goods continued in broad monthly and annual contraction, both before and after consideration for inflation, and for the effects of inclusion or not of the highly volatile month-to-month activity in Commercial Aircraft Orders (see *Table IV*).

Looking at the twelve months of New Orders through November 2019, versus those same months through November 2018, aggregate real New Orders were down by 3.1% (-3.1%) year-to-year for the twelve-month period through November 2019, down by a smaller 1.1% (-1.1%) net of the highly volatile Commercial Aircraft Orders, reflecting recent weakness in Boeing Aircraft Orders. Such is consistent with a recession, not a booming economy. Real Orders have contracted quarterly and/or annually in each of the last five quarters, and are on track for quarterly and annual contractions in Fourth-Quarter 2019, consistent with annual declines seen in Freight and Manufacturing activity as last seen in the 2014-2016 Mini-Recession.

[Table IV follows on the next page.]

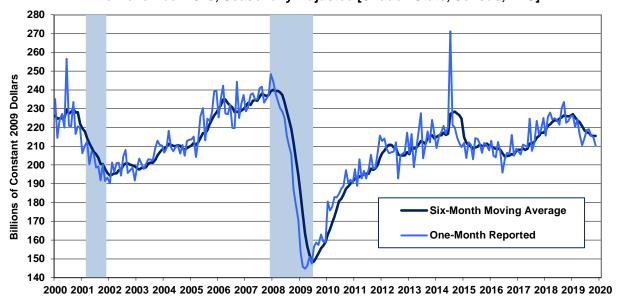
Table IV: November 2019 New Orders for Durable Goods

New	Orders for D	urable Goods	s (Novembe	r 2019 Report	ting)					
	Nominal Real									
Month	Millions of Current Millions of Constant									
		Dollars 2009 Dollars								
	Total		Ex-	T otal	Ex-					
	New	Commercial	Commercial	New	Commercial					
	Orders	Aircraft	Aircraft	Orders	Aircraft					
Aug 19	250.733	9.059	241.674	218.981	211.070					
Sep 19	247.059	7.340	239.719	215.584	209.179					
Oct 19	247.629	7.986	239.643	214.809	207.881					
	P	ercent Change		Percent Change						
	Mo/Mo	Mo/Mo	Mo/Mo	Mo/Mo	Mo/Mo					
Sep 19	-1.47%	-18.98%	-0.81%	-1.55%	-0.90%					
Oct 19	0.23%	8.80%	-0.03%		-0.62%					
Nov 19	-2.02%	-1.83%	-2.03%		-2.05%					
Prior M/M										
Sep 19	-1.38%	-18.98%	-0.72%	-1.47%	-0.81%					
Oct 19	0.60%	10.52%	0.30%	0.01%	-0.29%					
	Yr/Yr		Yr/Yr	Yr/Yr	Yr/Yr					
Sep 19	-5.776%		-3.49%	-7.69%	-5.45%					
Oct 19	-1.167%		-0.05%	-3.47%	-2.39%					
Nov 19	-3.694%		-2.71%	-5.86%	-4.90%					
Prior Y/Y										
Sep 19	-5.70%		-3.40%	-7.62%	-5.37%					
Oct 19	-0.72%		0.36%	-3.04%	-1.98%					
Sources: Commerce Department, Bureau of Labor Statistics, ShadowStats.com										

[Graphs 44 to 47 begin on the next page.]

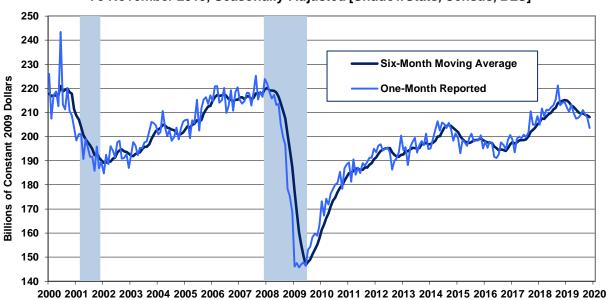
Graph 44: Real New Orders for Durable Goods, Monthly at Six-Month Smoothed, 2000 to Date

Real New Orders for Durable Goods Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To November 2019, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 45: Real New Orders for Durable Goods (Ex-Commercial Aircraft), Monthly and Smoothed, 2000 to Date

Real New Orders for Durable Goods (Ex-Commercial Aircraft)
Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods
To November 2019, Seasonally-Adjusted [ShadowStats, Census, BLS]

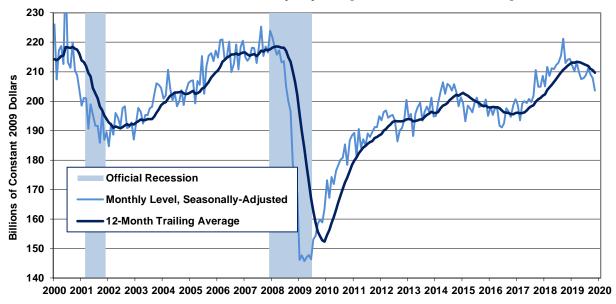


Plotted in Parallel to CASS Freight Index (12-Month Trailing Averages), See Graphs 4 to 6

Graph 46: Real New Orders for Durable Goods (Ex-Commercial Aircraft), Monthly and 12-Month Trailing Avg

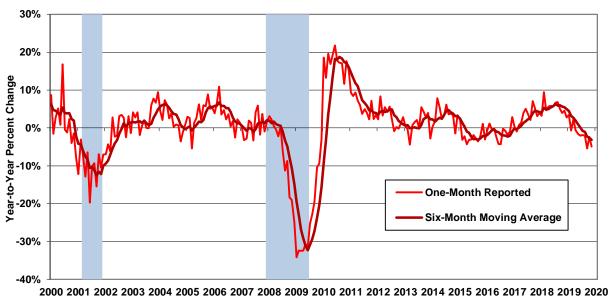
Real Durable Goods Orders (Ex-Commercial Aircraft)

Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To November 2019, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 47: Real New Orders for Durable Goods (Ex-Commercial Aircraft), Yr/Yr Monthly and 12-Month

Real New Orders for Durable Goods (Ex-Commercial Aircraft)
Year-to-Year Percent Change, Deflated by PPI Durable Manufactured Goods
To November 2019, Seasonally-Adjusted [ShadowStats, Census, BLS]



Housing Starts and Home Sales

November Home Sales Gained or Were Less Negative, in Context of Downside October Revisions.

Six-Month Smoothed November 2019 Housing Starts and Building Permits Both Continued to Notch Higher Amidst Nonsense Headline Monthly Volatility. Reported on December 17th, by the Census Bureau and HUD, the headline monthly gain of 3.2% in November Housing Starts, which followed a revised 4.5% [previously 3.8%] gain October, was not meaningfully different from zero at the 90% confidence interval, as usual. In contrast, the usually stable monthly change in the dominant Single-Unit category of the Building Permits series was meaningful, up by 0.8% in the month, following a revised gain of 3.4% [previously 3.2%] in October. With six-month smoothed Housing Starts and Building Permits both notching higher, those series still remain meaningfully shy, by 39.9% (-39.9%) and 34.5% (-34.5%), respectively, of ever having recovered their pre-recession highs.

November 2019 New-Home Sales Gained on Top of Sharp Downside Revisions to October Activity. As reported December 23rd, by the Census Bureau and HUD, November New-Home Sales gained 1.3% on top of a downwardly revised 2.7% (-2.7%) [previously down by 0.7% (-0.7%)] in October, on top of earlier downside revisions. Net of the prior-period revisions, the headline monthly change would have been a decline of 3.8% (-3.8%) in the month. November 2019 year-to-year growth softened to 16.9%, down from 27.5% [previously 31.6%] in October. This is the worst-quality, regularly published, near-term housing series, where monthly and annual changes rarely are statistically meaningful with a 90% confidence interval. With today's headline reporting, November 2019 activity was down by 48.9% from its pre-recession peak activity (see *Graphs 54* and *55*).

November 2019 Existing-Home Sales Declined on Top of Downwardly Revised October Activity, As reported December 19th, by the National Association of Realtors® (NAR at www.nar.realtor), November Existing-Home Sales declined by 1.7% (-1.7%) in the month, on top of a downwardly revised gain of 1.5% [previously up by 1.9%] in October. November year-to-year growth softened to 2.7%, from a downwardly revised 4.2% [previously 4.6%]. This series reflects greater stability and quality than the Census Bureau's New-Home Sales. Given November's headline detail, current activity remains shy by roughly 21% (-21%) of recovering its pre-recession peak activity, in the context of data redefinitions over time (see *Graphs 56* and *57*).

These series never have recovered the pre-recession peak activity, but they are trending higher. As seen in *Graph 50*, not only has the Housing Starts series never recovered its pre-recession high, but also has never recovered the pre-recession high of any prior economic cycle back to World War II.

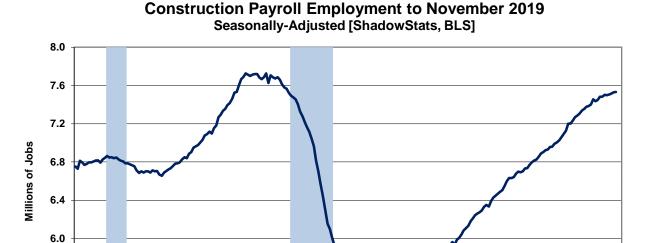
Construction Employment (Bureau of Labor Statistics)

Payrolls never have recovered their pre-recession highs, while year-to-year change is slowing rapidly.

Graph 48: Construction Payroll Employment, 2000 to November 2019

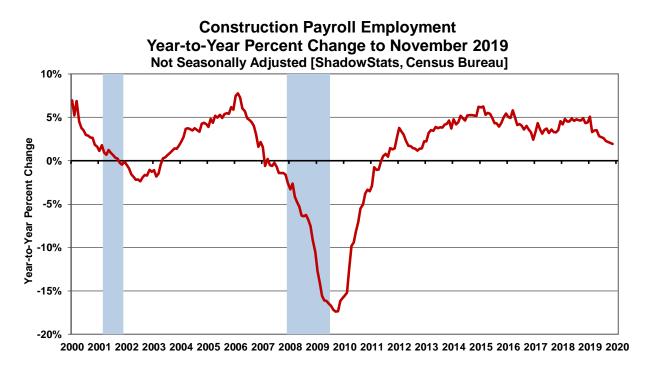
5.6

5.2



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Graph 49: Construction Payroll Employment, Year-to-Year Change, 2000 to November 2019



Graph 50: Housing Starts 1946 to Date

Housing Starts (Annual Rate by Month) 1946 to November 2019, Seasonally-Adjusted [ShadowStats, Census/HUD]



Graph 51: Housing Starts, Six-Month Smoothed Moving Average, 1946 to Date

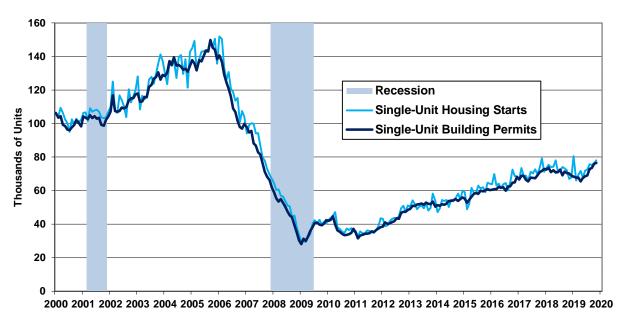
Housing Starts (Annual Rate by Month, 6-Month Moving Avg) 1946 to October 2019, Seasonally-Adjusted [ShadowStats, Census and HUD]



The more-stable Single-Unit Building Permits series is trending higher.

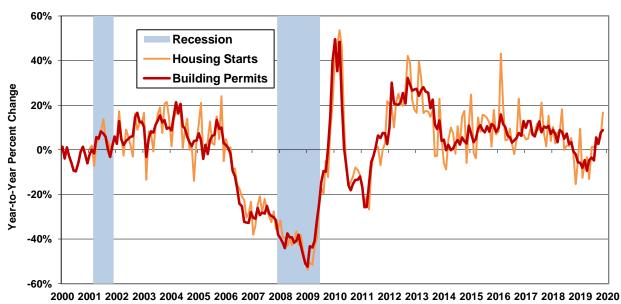
Graph 52: Single-Unit Building Permits vs. Housing Starts, 2000 to Date

Single-Unit Building Permits vs. Housing Starts (Monthly Rate) To November 2019, Seasonally-Adjusted [ShadowStats, Census and HUD]



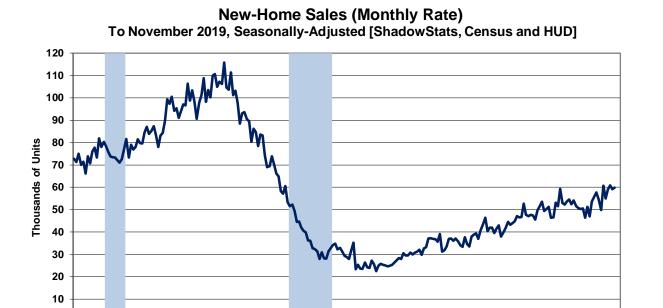
Graph 53: Single-Unit Building Permits vs. Housing Starts, Year-to-Year Change, 2000 to Date

Single-Unit Building Permits/Housing Starts (Yr-to-Yr Change) To November 2019, Seasonally-Adjusted [ShadowStats, Census and HUD]



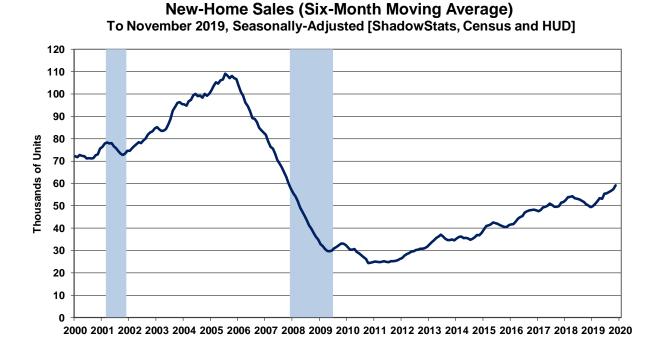
Graph 54: New-Home Sales, 2000 to Date

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2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Graph 55: New-Home Sales, Six-Month Smoothed Moving Average, 2000 to Date



Graph 56: Existing Home Sales, 2000 to Date

Existing-Home Sales (Monthly Rate) Single- and Multiple-Unit Sales, Non-Annualized Monthly Level

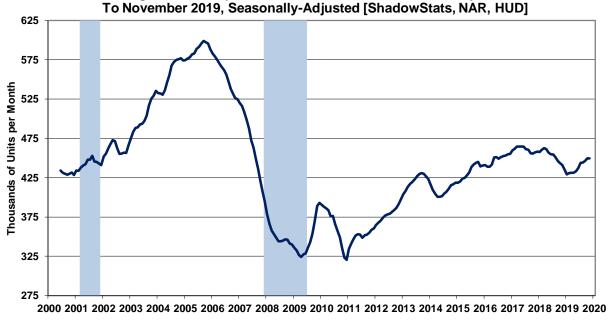
To November 2019, Seasonally-Adjusted [ShadowStats, NAR, HUD]



Graph 57: Existing Home Sales, Six-Month Smoothed Moving Average, 2000 to Date

Existing-Home Sales (Six-Month Moving Average)

Old and New Series Blended in 2006/2007
Single- and Multiple-Unit Sales, Non-Annualized Monthly Rate
November 2019, Seasonally-Adjusted [ShadowStats, NAR, HUD]



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