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

## COMMENTARY NUMBER 876 GDP Revision and the Business Cycle, February Household Income March 30, 2017

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Details of Economic Depression versus Recession, Recovery and Expansion

No Other Major Economic Series Comes Within Three Years of the Headline Brevity of the GDP Collapse into 2009 and Recovery into 2011, or Comes Close to Matching the Subsequent 12.2% GDP Expansion

Better-Quality Series Show Continued, Protracted Economic Collapse, with No Recovery of Pre-Recession Highs and No Economic Expansion

Annualized Fourth-Quarter Real Growth in Gross Domestic Product Revised to 2.08% from 1.86%

Fourth-Quarter Final Sales Growth (GDP net of Inventory Change) Fell to 1.07% versus 3.02% in Third-Quarter 2016

Initial Reporting of Fourth-Quarter Gross Domestic Income at 1.00%, Gross National Product at 2.88%

2016 Annual GDP Growth Still Was Weakest Since the Economic Collapse, Both Before and After Inflation Adjustment

**Broad Outlook Continues for Non-Recovering Activity and Economic Disruption** 

February Real Median Household Income Increased, Still Holding Below its Pre-Recession High and Signaling Consumer Liquidity Stresses

PLEASE NOTE: The next Commentary will be published over the weekend, reviewing the March 31st annual benchmark revisions to Industrial Production, followed by regular Commentaries on Tuesday, April 4th covering the February Trade Deficit and Construction Spending, and on Friday, April 7th, covering March Employment and Unemployment conditions. Please call me at (707) 763-5786, if you have questions or would like to talk.

Best wishes to all — John Williams

#### OPENING COMMENTS AND EXECUTIVE SUMMARY

**Real-World Economic Conditions—Depression vs. Recession, Recovery and Expansion (Part II).** Continuing from the *Opening Comments* of *Commentary No. 875*, ShadowStats is looking to define the current economic circumstance and what appears to be a significant and persistent overstatement of headline activity in the Gross Domestic Product (GDP) of recent decades, considered in terms of traditional business-cycle nomenclature and otherwise.

Where the popular media commonly have used the terms "Recession," "Recovery" and "Expansion" in recent years to describe the economic environment since 2007, ShadowStats contends that the term "Depression" also should be in the current economic descriptors, but not "Expansion," at least not yet. As properly defined, and in the context of a broad spectrum of headline economic reporting, a number of generally better-quality economic series do not support the "Full Recovery" and ongoing "Expansion" of the headline U.S. Gross Domestic Product (GDP). The following assessment and headline details review and continue the discussion begun in *Commentary No.* 875.

Shown numerically in *Table 1* and visually in *Graphs 1* to *12*, headline GDP—within the structure of standard business-cycle definitions—has shown a much-shorter recession and recovery, and a much-stronger subsequent expansion, than seen commonly in a number of key series. Those series range from headline employment, real retail sales, industrial production and housing, to indicators of consumer liquidity and corporate revenues. Where those components or related indicators contribute to the GDP calculations, the happy headline GDP results appear simply to be a fantasy, spiked meaningfully by the use of artificially-low inflation used to deflate the headline series (see the *Underlying Economic Reality* section in the *Executive Summary*).

Separately, consider that the National Bureau of Economic Research (NBER)—official arbiter of the U.S. business cycle—relies heavily on the industrial production and retail sales series for calling and timing recessions. Those indicators are included here.

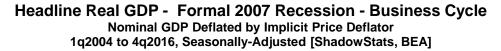
Simply put, and repeated in each GDP-related *Commentary*, the GDP (or the broader GNP detail headlined in earlier decades) simply remains the most worthless of the popular government economic series, in terms of determining what really is happening to U.S. business activity. The series is the most-

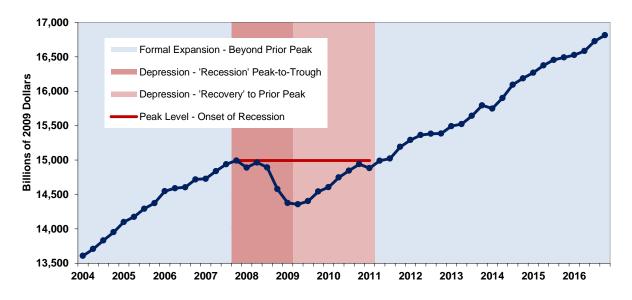
heavily-modeled, politically-massaged and gimmicked government economic indicator. It has been so since at least the 1960s, and that reporting quality deteriorated anew, sharply, in the 2016 benchmarking.

**Defining the Business Cycle.** In the pre-World War II economic lexicon, an economic contraction was known simply as a "Depression." Depression represented a dip in real or inflation-adjusted business activity, and it was composed of two phases, a "Recession," which encompassed the period of economic contraction from the business cycle's pre-contraction peak activity to its trough. The second phase of a Depression was its "Recovery," from the cycle trough to the recovery of the pre-recession peak. Growth beyond the Recovery commonly was known as "Expansion." The pre-recession peak defined the onset of Recession, the recession trough defined the onset of Recovery and recovery of the pre-recession high defined the end of the economic Depression and the onset of economic Expansion.

Post-World War II and post-Great Depression, common usage of economic-cycle descriptors dropped the headline term "Depression" in favor of the "Recession" and "Recovery" sub-components. Nonetheless, an economy in "Recovery" still is in "Depression" having not fully recovered its prior peak activity, and "Recovery" is not the same as "Expansion." When ShadowStats argues that the economy has not recovered, that is in terms of economic activity not having recovered its pre-recession high. Standard practice evolved so as to recognize Recession as encompassing two or more consecutive quarters of contraction.

Graph 1: Headline Real GDP





That said, as reflected in *Graph 1* and *Table 1*, the headline inflation-adjusted, real GDP completed its latest, headline Depression Cycle, which began in fourth-quarter 2007 (the pre-recession peak, onset of Recession), troughed in second-quarter 2009 (beginning of Recovery), when it fully recovered its pre-recession peak in third-quarter 2011 (beginning of Expansion, having ended the Recovery and the formal

Depression cycle). Since then, headline real GDP activity has been in continual Expansion, standing 12.2% above its pre-recession high as of today's third-estimate of fourth-quarter 2016 (see the *Executive Summary* and *Reporting Detail*). Fourth-quarter 2016 GDP growth now is subject only to an annual benchmark revision on July 28th, and annual benchmark revisions in subsequent years (the next comprehensive overall to the series, back to 1929 is due in July 2018.

Table 1: Business Cycle Definitions Applied to Various Economic Series (Graphs Follow)

		Peak	Trough	Recession			Recovery	Depression		Expansion	4q201
		_								_	
Inflation-Adjusted	Cromb	Pre- Recession	Cycle	Peak-to- Trough in	Peak-to- Trough	Recovery	Trough-to- Peak in	Recession & Recovery		Post-	4q201 versu
Real Series	Graph No.	Peak	Trough	Quarters	Change	of Peak	Quarters	in Quarters		Recovery in Quarters	Peak
Roll Bolles	110.	Touk	Hough	Quarters	Chunge	OI I CUR	Quarters	III Quinters		in Quarters	1 Cak
GDP	1	4q2007	2q2009	6	-4.2%	3q2011	6	12		22	+12.29
Payroll Jobs	2	1q2008	1q2010	8	-6.1%	2q2014	18	26		10	+5.0
Employment	3	4q2007	4q2009	8	-5.1%	3q2014	19	27		9	+3.9
Full-Time Employment	4	4q2007	1q2010	9	-8.9%	3q2015	22	31		5	+2.2
Real Retail Sales	5	4q2007	2q2009	6	-12.2%	3q2013	17	23		13	+7.9
Industrial Production*	6	4q2007	3q2009	7	-15.5%	4q2015*	21	36	*	0	-1.0
- Double Dip Downturn*	6	4q2015	Ongoing	Ongoing	n.a.	Ongoing	n.a.	8	**	0	-1.7
Manufacturing	7	4q2007	2q2009	6	-20.1%	Ongoing	30	36	**	0	-5.8
Consumer Goods Mfr.	8	2q2007	2q2009	8	-14.0%	Ongoing	30	38	**	0	-9.1
Durable Goods Orders	9	4q2007	1q2010	5	-33.5%	Ongoing	31	36	**	0	-6.3
Housing Starts	10	3q2005	1q2009	14	-79.6%	Ongoing	31	45	**	0	-52.2
Median Income	11	1q2008	3q2011	14	-9.0%	Ongoing	21	35	**	0	-1.6
S&P 500 Revenues	12	4q2007	Ongoing	Ongoing	n.a.	Ongoing	n.a.	36	**	0	-26.0

**Reality Check.** The following graphs show various headline indicators, plotted in the context of the business-cycle definitions, on a quarterly basis, through fourth-quarter 2016 (as tentatively just finalized for the GDP). Each series is detailed in the accompanying twelve graphs and table. If expressed in monetary terms, it is plotted in inflation-adjusted real numbers (deflated by the indicated headline measure) showing quarterly levels of detail, highlighted in terms consistent with the preceding definitions. Background *Commentaries* to the various series are linked in the *Week, Month and Year Ahead* section.

All Series Plotted in This Analysis Reflect Headline Detail, No ShadowStats "Alternate" Estimates. ShadowStats contends that a variety of indicators beyond the GDP, including real Retail Sales, components of Industrial Production and real New Orders for Durable Goods standardly show overstated headline economic real growth, due to changed inflation methodologies of recent decades, which have reduced headline inflation in a manner inconsistent with common experience. Understate the inflation

used to deflate an economic indicator, and headline real growth is overstated in parallel (see the <u>Public</u> Commentary on Inflation Measurement).

While ShadowStats standardly prepares alternate measures of those affected series (see the *Executive Summary*, <u>Commentary No. 872</u>, <u>Commentary No. 874</u> and <u>Commentary No. 875</u>), all the graphs used in the accompanying analysis simply are the headline series, using headline inflation measures.

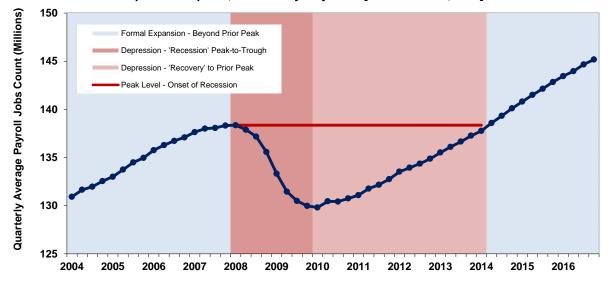
Separately, the various employment data, particularly the headline payroll employment numbers are subject to several levels of bias factors. On the household survey side, annual population distortions from the regular redefinition of the size of the base U.S. population, impact the headline body counts in the employment numbers (see discussion in *Commentary No. 864*).

*Employment.* Nothing is more directly related to economic activity than employment, so the cycle here should be reasonably consistent with the GDP. Yet, the duration of the Depression for the all the labor data was at least double that of the GDP, with the headline expansion less than half the pace seen with the GDP (see *Table 1*). *Graphs 2* to 4 reflect first the headline payroll count from the payroll survey (it counts part-time jobs as employed, so it counts jobs instead of people who are employed). From the household survey, the two employment counts include total individuals employed (including part-time work) and total individuals employed full-time (see background to these series in *Commentary No. 871*).

**Retail Sales.** The last series in this analysis to show any formal Expansion, Retail Sales, adjusted for headline CPI-U inflation by the St. Louis Fed, is a traditional benchmark for business-cycle timing. Reflected in *Graph 5* and *Table 1*, retail sales also shows a more-protracted Depression, with Expansion running slightly above half the GDP pace. Consider, too, *Graphs 8* and *11* of consumer goods production (a direct link) and household income (enables purchases) as reality checks on the retail series.

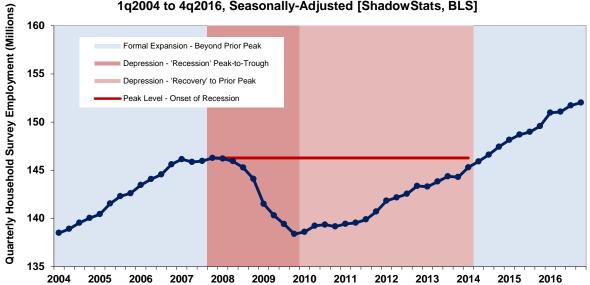
Graph 2: Payroll Employment

## Headline Payroll Jobs Count Formal Business Cycle Definitions Applied Quarterly Average of Monthly Payroll Employment Level 1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, BLS]



Graph 3: Household Survey Employment

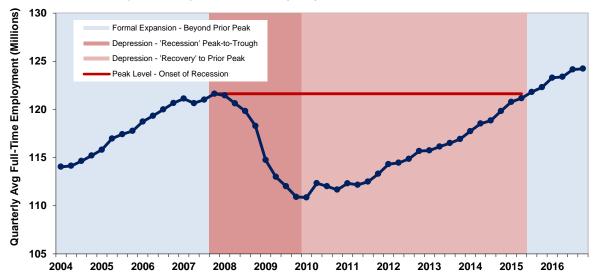




Graph 4: Household Survey Full-Time Employment

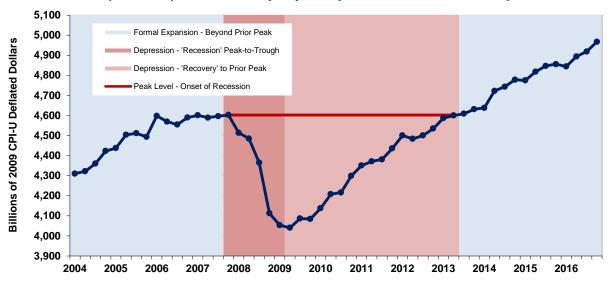
### **Household Survey Full-Time Employment Count Formal Business Cycle Definitions Applied Quarterly Average of Monthly Payroll Employment Level**

1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, BLS]



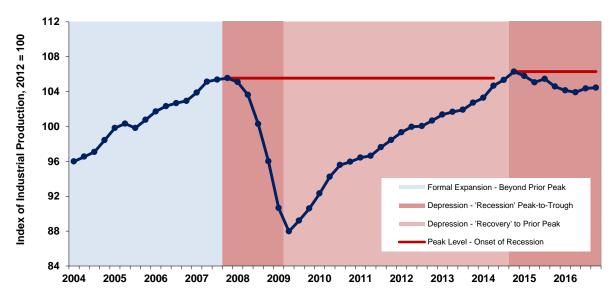
Graph 5: Real Retail Sales, Deflated by the CPI-U

## Headline Real Retail Sales Formal Business Cycle Definitions Applied Nominal Retail Sales Deflated by the CPI-U (2009 = 100) 1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



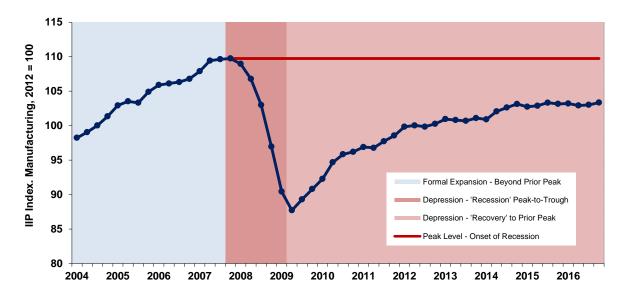
Graph 6: Index of Industrial Production

### Index of Industrial Production (2012 = 100) Formal Business Cycle Definitions Applied 1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, FRB]



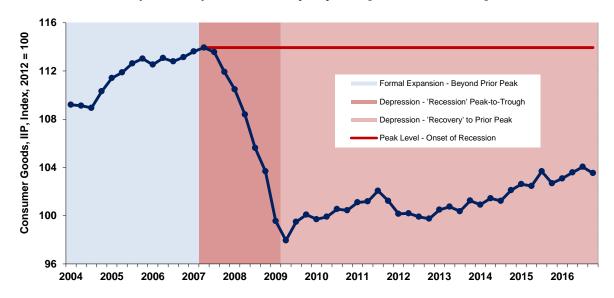
Graph 7: Manufacturing Sector, Industrial Production

### Index of Industrial Production - Manufacturing (2012 = 100) Formal Business Cycle Definitions Applied 1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, FRB]



Graph 8: Consumer Goods Manufacturing Sector, Industrial Production (see Retail Sales)

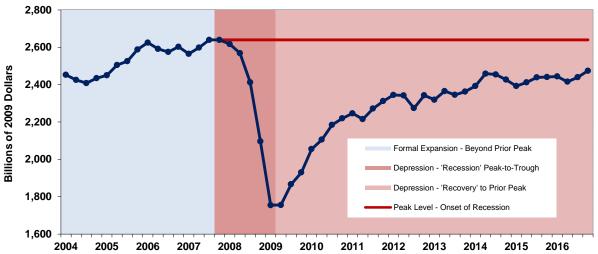
### Consumer Goods Manufacturing (Durable and Nondurable) Formal Business Cycle Definitions Applied (2012 = 100) 1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, FRB]



Graph 9: New Orders for Durable Goods (see Industrial Production), Deflated by PPI Mfr Durable Goods

### **New Orders for Durable Goods (Ex-Commercial Aircraft)**

Formal Business Cycle Definitions Applied
Deflated by PPI Manufactured Durable Goods
1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



Industrial Production—the other traditional benchmark for business-cycle timing—and its sub-components of manufacturing and consumer goods manufacturing are reflected in the preceding *Graphs 6* to 8, while durable goods orders, a leading indicator to production, is reflected in *Graph 9*. The production series goes through its annual benchmarking tomorrow (March 31st), which will be reviewed in the next *Commentary*, over the weekend.

The aggregate series here is in a double-dip recession, with one quarter that broke above the pre-recession high in fourth-quarter 2014, but it turned down anew in first-quarter 2015. The series never formally recovered and is in a continuing downturn; the GDP should be there to. The sub-components never broke above their pre-recession highs. Related to retail sales (*Graph 5*), consumer goods manufacturing ranges from automobiles to bread (*Graph 8*).

*Graphs 10, 11* and *12* respectively cover housing starts, median household income (see the next section), and S&P 500 real revenues, neutered of estimated share-buyback distortions. The most severe-downturn has been seen in the housing sector, beginning in 2005, with starts still down by more than 50% (-50%) from their pre-recession high.

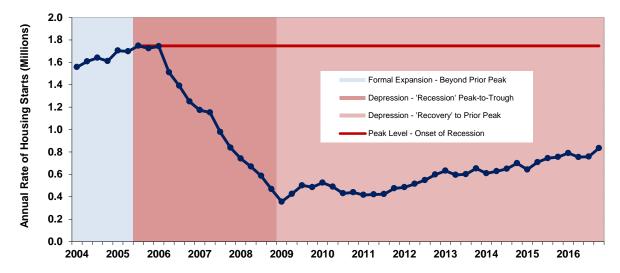
Real median household income is a direct measure of consumer liquidity conditions.

Real S&P 500 revenues are a direct measure of a domestic economic activity.

Graphs 6 to 12 reflect major series that never have recovered their pre-recession peaks.

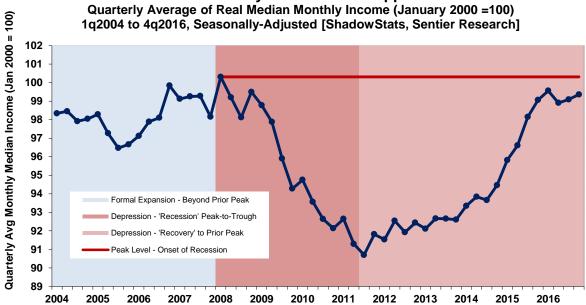
**Graph 10: Housing Starts** 

### Housing Starts - Annual Rate by Quarter (Millions) Formal Business Cycle Definitions Applied 1q2004 to 4q2016, Seasonally-Adjusted [ShadowStats, Census, BLS]



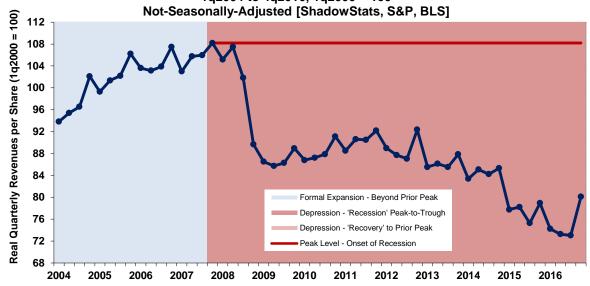
Graph 11: Real Median Household Income, Deflated by the CPI-U

### Real Median Household Income Business Cycle Definitions Applied



Graph 12: Real S&P Quarterly 500 Revenues, Deflated by the CPI-U

### Real S&P 500 Quarterly Revenues per Share Adjusted for Share Buybacks, Deflated by CPI-U Formal Business Cycle Definitions Applied 1q2004 to 4q2016, 1q2000 = 100



Real Median Household Income—February 2017—Showed a Statistically-Significant Monthly Gain. The March 2017 Conference Board's Consumer Confidence Index® surged to a level not seen since before the 2001 recession, while the University of Michigan's Consumer Sentiment measure was fluttering at a high level in its advance-reading for March. Nonetheless, while February 2017 real Median Household Income rose in the month, it held below its pre-recession peak, consistent with ongoing consumer-liquidity stresses.

Reported today, March 30th, by <a href="www.SentierResearch.com">www.SentierResearch.com</a>, the level of the February 2017 Real Median Household Income Index rose month-to-month by a statistically-significant 1.01%, having declined by 0.23% (-0.23%) in January. The series also rose by 0.16% year-to-year in February 2017, having declined by 0.99% (-0.99%) in January 2017. Those details are plotted in the accompanying *Graphs 13* and *14*, both in terms of level and year-to-year change. Shown earlier in *Graph 11*, the quarterly series had not recovered its pre-recession high through fourth-quarter 2016.

Where low or negative headline CPI-U inflation and related spikes in inflation-adjusted real income had resulted from collapsing gasoline prices in 2014, that process began to reverse in the latter part of 2016.

Severe and persistent constraints on consumer liquidity of the last decade or so drove economic activity into collapse through 2009, and those conditions have prevented meaningful or sustainable economic rebound, recovery or ongoing economic expansion since. The limited level of, and growth in, sustainable real income, and the ability and willingness of the consumer to take on new debt have remained at the root of a consumer liquidity crisis and ongoing, broad economic woes.

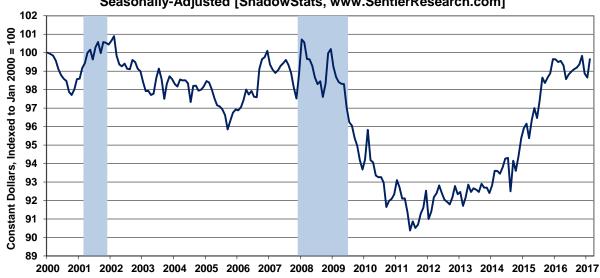
Those same pocket-book issues contributed to the anti-incumbent electoral pressures in the 2016 presidential race. Where the post-election environment showed a near-term surge in consumer optimism, followed by some high-level flattening, strong confidence was indicated for March 2017 detail. Nonetheless, underlying liquidity conditions and reality—particularly income and credit—remain well shy of consumer hopes and needs.

Graph 13: Monthly Real Median Household Income (2000 to 2017) Index, January 2000 = 100

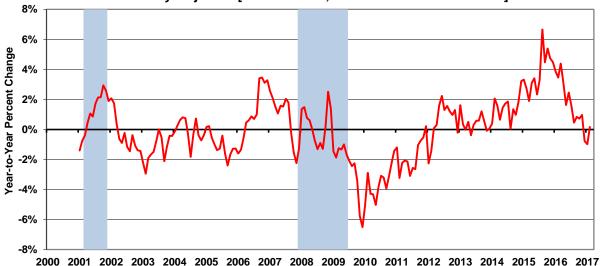
Monthly Real Median Household Income Index

Deflated by Headline CPI-U, January 2000 to February 2017

Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]



Graph 14: Monthly Real Median Household Income (2000 to 2017) Year-to-Year Change
Monthly Real Median Household Income Yr/Yr Change
Deflated by Headline CPI-U, January 2001 to February 2017
Seasonally-Adjusted [ShadowStats, www.SentierResearch.com]



The next regular update to *Consumer Liquidity* will follow in *Commentary No.* 878 of April 4th, which will encompass this report on February Household Income and the March estimates of the Conference Board's Consumer Confidence Index® (it rose sharply) and the University of Michigan's Consumer Sentiment measure (due for release tomorrow, March 31st). The previous update was in *Commentary No.* 871 and as reviewed in the *CONSUMER LIQUIDITY* section of *No.* 859 Special Commentary.

**Today's** *Commentary* (March 30th). The *Opening Comments* reviewed formal business-cycle definitions, in the context of a variety of major economic indicators, along with coverage of the just-released February 2017 real median monthly Household Income from www.SentierResearch.com.

The following *Executive Summary* covers summary detail and graphs of the third estimate of, second revision to fourth-quarter 2016 GDP, and the related, initial releases of fourth-quarter GNP and GDP, with the headline detail expanded upon in the *Reporting Detail*.

The Week, Month and Year Ahead previews next week's reporting of the February 2017 trade deficit and construction spending and the employment and unemployment detail for March 2017.

Executive Summary: Gross Domestic Product (GDP)—Fourth Quarter 2016, Third Estimate—Greater Inventory Building Partially Boosted a Minor Upside Revision to Growth. The third estimate of fourth-quarter 2016 GDP came in minimally above consensus (expected at 2.0%). It showed a statistically-insignificant, real (inflation-adjusted) annualized, quarterly headline increase of 2.08% (previously 1.86%), following gains of 3.51% in third-quarter 2016, 1.42% in second-quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

Headline year-to-year real GDP growth in fourth-quarter 2016 revised to 1.96% (previously 1.90%), versus 1.65% in third-quarter 2016, 1.28% in second-quarter 2016, 1.57% in first-quarter 2016, and 1.88% in fourth-quarter 2015. Annual 2016 GDP real growth was a revised 1.62% (previously 1.60%), versus 2.60% in 2015. In both real and nominal terms, annual growth in 2016 was the lowest since the formal economic recovery.

Plots of the historical GDP levels as well as annual GDP changes are found in *Graphs 23* to 28 in the *Reporting Detail*, along with related *Graphs 15* to 22 later in this section.

*Fourth-Quarter 2016 GDP, Third Estimate - Growth Distribution.* The third estimate of fourth-quarter 2016 GDP came in at an annualized real growth rate of 2.08% [previously up by 1.86%, initially 1.88%], down sharply versus headline 3.51% growth in third-quarter 2016 GDP growth.

The annualized growth number in each sub-category of consumer spending, business/residential investment, trade deficit and government spending is the additive contribution to the total, headline change in GDP, where 2.40% + 1.47% - 1.82% + 0.03% = 2.08%. <u>Commentary No. 869</u> of February 28th detailed the growth-distribution for the initial estimate of fourth-quarter 2016 GDP.

Regrouped by general product line, the BEA estimated that the headline 1.86% quarterly GDP growth rate included a 0.97% [previously 0.69%, initially 0.60%] growth-rate contribution from services, a revised

0.67% [previously and initially 0.75%] contribution from goods and a 0.44% [previously 0.41%, initially 0.52%] contribution from structures.

*Contributing Growth Factors.* Headline fourth-quarter 2016 GDP growth still was dominated by an increasingly-large, involuntary buildup in inventories, gains in construction, vehicle sales and state- and local-government spending, and heavily offset by a larger, sharply deteriorating trade deficit.

- Consumer Spending Contributed 2.40% [Previously 2.05%, Initially 1.70%] to Fourth-Quarter 2016 GDP Growth; Third-Quarter Growth Contribution Was 2.03%. The consumer spending category still was dominated by motor vehicle sales (including recreational), food consumption and "other" services.
- Business/Residential Investment Contributed 1.40% [Previously 1.45%, Initially 1.67%] to Fourth-Quarter 2016 GDP Growth; Third-Quarter Growth Contribution Was 0.50%. Contrary to private indicators, surging real estate investment still helped to prop activity here, but at a slower pace. The dominant factor remained an even-stronger spike in inventory growth, which contributed 1.01% [previously 0.94%, initially 1.00%] by itself of the upwardly revised headline 2.08% GDP growth rate. Accordingly, headline final sales—GDP net of inventory change—fell to a revised annualized quarterly growth rate of 1.07% [previously 0.92%, initially 0.88%], versus a 3.02% third-quarter 2016 increase.
- Net Exports Subtracted 1.82% (-1.82%) [Previously and Initially 1.70 % (-1.70%)] from Fourth-Quarter 2016 GDP Growth, Third-Quarter Growth Contribution Was 0.85%. Hitting the headline growth estimate for fourth-quarter GDP hard was a revised, even-deeper sharp deterioration in the quarterly trade deficit. The quarterly move here reversed the highly-suspect, sharp improvement in the headline third-quarter deficit, which was the primary prop behind the pre-election jump in third-quarter 2016 GDP (see Commentary No. 860).
- Government Spending Added 0.03% [Previously 0.06%, Initially 0.21%] to Fourth-Quarter 2016 GDP Growth, Third-Quarter Growth Contribution Was 0.14%. Federal government spending still subtracted 0.08% (-0.08%) from the headline fourth-quarter GDP growth. That was more than offset by a reduced surge in state- and local government "investment," circumstances usually in the realm of highly unstable Affordable Care Act (ACA) issues.

*Implicit Price Deflator (IPD)*. The third estimate of fourth-quarter 2016 GDP inflation, or the implicit price deflator (IPD), showed a revised annualized quarterly change of 2.10% (previously 2.02%), versus an annualized 1.41% increase in third-quarter 2016. Year-to-year, fourth-quarter 2016 IPD inflation revised to 1.56% (previously 1.54%), versus 1.27% in third-quarter 2016. In terms average annual inflation, the 2016 IPD inflation was a revised 1.30% (previously 1.31%) versus 1.08% in 2015. Extended detail and CPI-U comparisons follow in the *Reporting Detail*.

Gross National Product (GNP) and Gross Domestic Income (GDI). GNP remains the broadest measure of U.S. economic activity, where GDP is GNP net of trade flows in factor income (interest and dividend payments). The initial headline annualized real fourth-quarter 2016 GNP growth came in at 2.88%, versus 3.38% in third-quarter 2016. Year-to-year, fourth-quarter 2016 real growth was 2.09%, versus 1.71% in third-quarter 2016. For all of 2016, annual real GNP growth was 1.60%, versus 2.33% in 2015.

GDI is the theoretical income-side equivalent to the consumption-side GDP estimate. The GDP and GDI are made to equal each other, every quarter, with the addition of a "statistical discrepancy" to the GDI-side of the equation. Fourth-quarter 2016 GDI rose at an annualized pace of 1.00%, versus 5.01% in third-quarter 2016. Year-to-year, fourth-quarter 2016 real growth was 1.86%, versus 1.98% in third-quarter 2016. For all of 2016, annual real GDI growth was 1.64%, versus 2.52% in 2015. Extended details follow in the *Reporting Detail*.

Underlying Economic Reality. [Much of the regular discussion and all of the comparative economic series traditionally used in these monthly GDP Commentaries were expanded upon in the ECONOMY section of No. 859 Special Commentary of January 8th, incorporated here by reference. Some of the usual comparative charts were recast for the business-cycle discussion in the Opening Comments section and some text from prior Commentaries is repeated here, updated as appropriate. Fundamentally, the broad U.S. economy never recovered fully from its collapse into 2009, with continued low-level stagnation that generally has turned down anew, although there are nascent indications of a possible, near-term bottoming, as discussed in General Commentary No. 867.]

Despite the booming 3.51% real annualized GDP growth in third-quarter 2016 and the revised 2.08% gain in today's headline fourth-quarter GDP detail, realistic, underlying U.S. economic activity has continued in a deepening-to-flattening and as-yet-unrecognized "new" recession (see *Graph 6* of Industrial Production in the *Opening Comments*). Headline monthly reporting activity in better-quality subsidiary economic series continues to confirm that general direction (the ShadowStats contention remains that the "new" downturn is in reality just a continuation of the economic crash into 2009). Such is despite the Trump Administration trying to move quickly to generate new economic stimulus. Assuming legislative cooperation from Congress, and given basic economic lead times, the first major, positive impact on the economy from that would be in early-2018, at the earliest. Interim economic activity and even headline GDP reporting still should turn lower in the next several quarters.

Discussed in <u>Commentary No. 823</u>, the 2016 benchmark revisions effectively were neutral in aggregate, with the business-cycle reporting "smoothed" by the BEA. The revisions were not of a nature to trigger formal immediate recognition of a "new" or double-dip recession, which likely still will be clocked from December 2014. While that should happen eventually, the focus now should be on the rapidly weakening economy in the next several months (first- and second-quarter 2017 GDP), which still could trigger the "formal" recession recognition.

Beyond the smoothing gimmicks of the 2016 benchmarking, last year's 2015 GDP annual benchmark revisions coverage—in <u>Commentary No. 739</u>—noted that annual benchmarkings increasingly were reshaping the GDP-reporting history into a post-2007 collapse pattern of successive multiple dips. By the next "comprehensive" GDP benchmark revision in July 2018 (a restatement of activity back to 1929), post-2007 historical GDP reporting should be confirming a non-recovering, multiple-dip economic collapse including a "new" or ongoing recession.

That circumstance should encompass the evolving, current downturn in broad, domestic economic activity, discussed in *No. 859 Special Commentary*. Again, the present "new" recession or multiple-dip downturn remains likely to be timed from December 2014, without headline back-to-back contractions of quarterly GDP currently in place. Formal recognition of same remains pending, where consecutive quarterly GDP contractions no longer are necessary for formal recession recognition (see the opening paragraphs of *Commentary No. 823*).

Headline Aggregate GDP Remains Heavily Overstated versus Underlying Reality. Formal headline GDP activity continues to run well above economic reality as signaled by a number of better-quality business indicators, as reviewed in today's *Opening Comments* and *No. 859 Special Commentary*. A sampling of those indicators—plotted in this section—includes such varied series as domestic freight activity (*Graph 19*), the employment-population ratio (*Graph 20*), U.S. petroleum consumption (*Graph 21*) and total real U.S. construction spending (*Graph 22*). Either the GDP reporting is wrong, or most other major economic series are wrong (again, see the *Opening Comments*).

While the GDP is heavily modeled, imputed, theorized and gimmicked, it also encompasses reporting from those various major economic series and private surveys, which still attempt to measure real-world activity. Flaws in the GDP inflation methodologies and simplifying reporting assumptions have created the headline post-2009 "recovery."

Accordingly, the broad ShadowStats economic outlook has not changed, and, again, the gist of most of following text remains along the lines as recently expounded upon in <u>No. 859</u>. The details and numbers here, however, are updated for the latest headline information. In combination, these various collapsing economic indicators eventually should engender a formal recession call, irrespective of the timing of actual, if any, headline quarterly contractions in real GDP, or what likely has been related political gaming of the data up through year-end 2016.

Fundamental, real-world economic activity shows that the broad economy began to turn down in 2006 and 2007, plunged into 2009, entered a protracted period of stagnation thereafter—never recovering—and then began to turn down anew in recent quarters. Irrespective of the reporting gimmicks introduced in the July 2013, July 2014 and July 2016 GDP benchmark revisions—including a recent pattern of inclusion and estimation of highly-questionable data on the Affordable Care Act (ACA) and related healthcare spending—a consistent, fundamental pattern of faltering historical activity is shown in the accompanying "corrected" GDP graphs.

Again, discussed in <u>Commentary No. 871</u> and as reviewed in the <u>CONSUMER LIQUIDITY</u> section of <u>No. 859 Special Commentary</u>, with liquidity-strapped consumers unable to fuel sustainable growth in consumption, a full business recovery could not have taken place since 2009. A recovery will not be forthcoming until consumer structural income and liquidity problems are resolved, including more-normal credit functioning of the domestic banking system.

*Official and Corrected GDP.* Reviewed and graphed in today's *Opening Comments*, the full economic Recovery and post-3q2011 Expansion indicated by the official, real GDP numbers, remains an illusion. In scope, it is not supported by other major economic series. It is a statistical illusion created at least partially by using a too-low rate of inflation in deflating (removing certain inflation effects) from the GDP series. The accompanying graphs tell that story, updated for the third estimate of fourth-quarter 2016, as well as reflecting a sampling of other elements of economic reality.

The first set of graphs (*Graphs 15* and *16*) updates the detail 1970-to-date, expressed in billions of 2009 dollars as used with the headline GDP. The graphs show official periods of recession as shaded areas, with ShadowStats-defined recessions indicated by the lighter shading in *Graph 16*, the second graph of the first set, as published initially in 2014 Hyperinflation Report—Great Economic Tumble.

The second set of graphs (2000-to-date) is the one that traditionally has been incorporated in the GDP *Commentaries*. *Graphs 17* and *18* show short-term detail, expressed on an index base where first-quarter 2000 = 100.0.

Shown in the first graph of each set (*Graphs 15* and *17*) of official *Headline Real GDP*, GDP activity has been reported above pre-2007 recession levels—fully recovered and in economic expansion—since third-quarter 2011, and headline GDP has shown sustained growth since (growth pauses or interruptions for second-half 2012 and first-quarter 2014 excepted). Adjusted for GDP inflation (the implicit price deflator or IPD), the third estimate of fourth-quarter 2016 GDP currently stands 12.2% above its pre-recession peak-GDP estimate of fourth-quarter 2007. As discussed in the *Opening Comments*, no major economic indicators are showing recovery or expansion close to the GDP's. None of the series covered in this section and in *No. 859* has shown significant recoveries.

In contrast, the "corrected" GDP version, in the second graph of each set (*Graphs 16* and *18*), shows fourth-quarter 2016 GDP activity to be down by 7.1% (-7.1%) from its pre-recession peak of first-quarter 2006. Noted in *General Commentary No. 867* and *Commentary No. 869*, headline Industrial Production and related Manufacturing series already are rivaling the Great Depression in terms of the number of quarters of non-Expansion (subject to tomorrow's annual benchmark revisions of the production series).

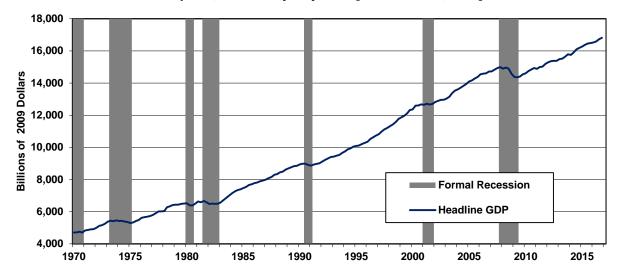
Again, the second graph in each series (*Graphs 16* and *18*) plots the *Corrected Real GDP*, adjusted for the understatement inherent in official inflation estimates (see <u>Public Commentary on Inflation</u> <u>Measurement</u>), with the deflation by the implicit price deflator (IPD) adjusted for understatement of roughly two-percentage points of annual inflation in recent years. The inflation understatement has resulted from hedonic-quality adjustments, also as discussed in the *Hyperinflation Reports*.

The pattern of economic collapse into 2009, followed by some minimal recovery, low-level stagnation and renewed contraction is seen with many series. As shown in *Graphs 19* to 22 (again see <u>No. 859</u>), better-quality independent numbers—including some U.S. government—put the lie to the gimmicked headline reporting that has been massaged for decades by government agencies and consulting academics.

[Graphs 15 to 22 begin on the following page.]

Graph 15: Real GDP Index (1970-2016), Third Estimate of Fourth-Quarter 2016

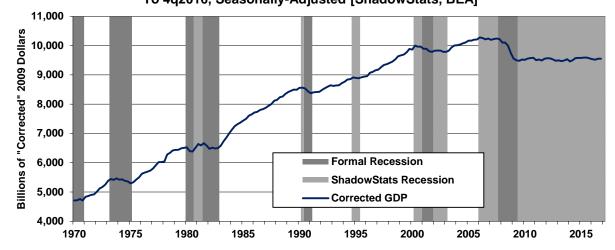
### Headline Real GDP Nominal GDP Deflated by Implicit Price Deflator To 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



Graph 16: "Corrected" Real GDP (1970-2016), Third Estimate of Fourth-Quarter 2016

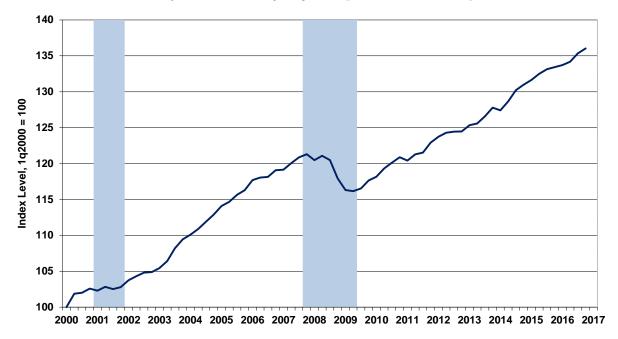
### **Corrected Real GDP**

Nominal GDP Deflated by Implicit Price Deflator Adjusted for Understatement of Annual Inflation
To 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



Graph 17: Real GDP Index - Headline Real GDP through Third Estimate of Fourth-Quarter 2016

### Headline Real GDP -- Index Level GDP Deflated by Official Implicit Price Deflator To 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



Comparative Indicators. Graph 18 of the "corrected" GDP series follows, with subsequent, limited sampling of comparative economic indicators (see the expanded coverage in <u>No. 859</u>). The comparative indicators here and in the *Opening Comments* generally confirm the story from the "corrected" GDP graph, that the economy never recovered from its collapse into 2009 and is either in renewed downturn or in continuing low-level stagnation, albeit some of the latter still is slightly up-trending.

Graph 19 shows the Cass Freight Index<sup>TM</sup> measure of North American freight volume through February 2017 (see <u>Commentary No. 875</u>), used with the permission of Cass Information Systems, Inc. Few measures better reflect the actual flow of goods in commerce than freight activity. As a broad measure of basic domestic economic activity, the index has much more in common with the "corrected" GDP in Graph 18, than with the headline GDP of Graph 17. It also tends to follow activity in New Orders for Durable Goods, again, as noted in prior <u>Commentary No. 875</u> (see Graphs 1 and 2 there).

*Graph 20* of the employment to population ratio remains a solid indicator of underlying labor conditions in the context of the broad population and long-term discouraged and displaced workers, reflected there through February 2017 (see *Commentary No. 871*).

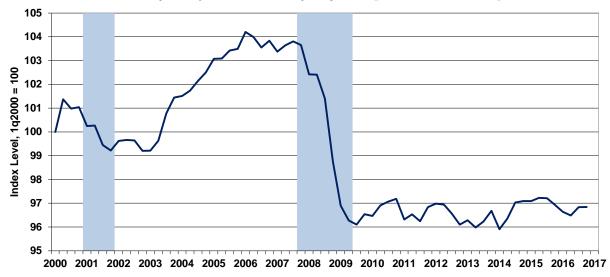
*Graph 21* of U.S. Petroleum Consumption and *Graph 22* of inflation-adjusted total U.S. Construction Spending (see *Commentary No. 870*, including everything from roads and office buildings to residential construction) are among the variety of indicators that show patterns of economic collapse into 2009/2011, followed by some minimal (not full) recovery and ongoing.

Other series regularly compared here with the headline GDP reporting, again are found in today's *Opening Comment* section covering the business cycle

Graph 18: "Corrected" Real GDP Index (2000-2016), Third Estimate of Fourth-Quarter 2016

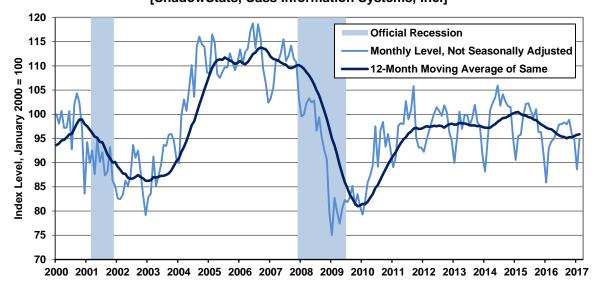
#### **Corrected Real GDP**

Nominal GDP Deflated by Implicit Price Deflator Corrected for Roughly Two-Percentage Point Understatement of Annual Inflation Quarterly to 4q2016, Seasonally-Adjusted [ShadowStats, BEA]



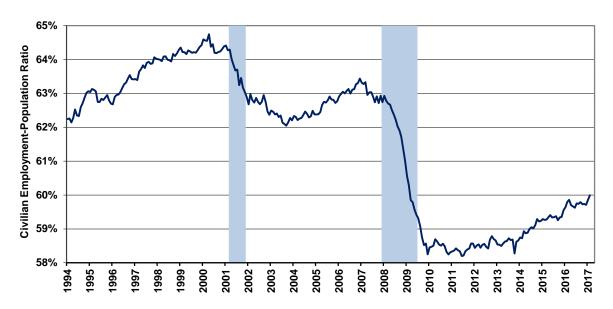
Graph 19: Cass Freight Index ™ (2000-February 2017)

### Cass Freight Index<sup>™</sup> (Jan 2000 = 100) To February 2017, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



Graph 20: Civilian Employment-Population Ratio

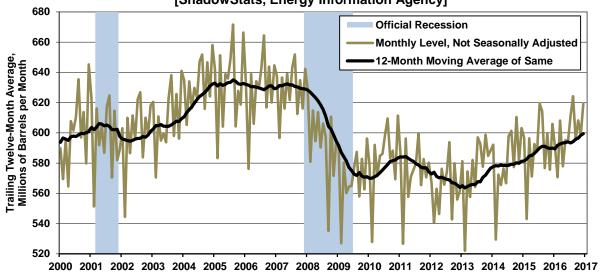
### Civilian Employment-Population Ratio To February 2017, Seasonally-Adjusted [ShadowStats, BLS]



Graph 21: U.S. Petroleum Consumption (2000 – 2016)

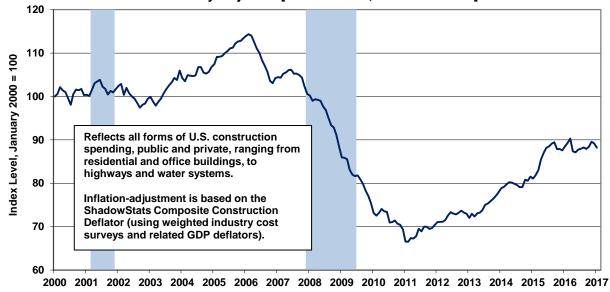
### U.S. Product Supplied of Crude Oil and Petroleum Product

To December 2016, Not Seasonally Adjusted,
Millions of Barrels per Month, Trailing Twelve-Month Average
[ShadowStats, Energy Information Agency]



Graph 22: Real Total U.S. Construction Spending (2000 - 2017)

### Index of Real Total Value of Construction Put in Place To January 2017, Inflation Adjusted (Jan 2000 = 100) Seasonally-Adjusted [ShadowStats, Census Bureau]



[The Reporting Detail contains significant further analysis and graphs on the GDP, GNP and GDI.]

#### REPORTING DETAIL

#### **GROSS NATIONAL PRODUCT (Fourth-Quarter 2016, Third Estimate, Second Revision)**

**Underlying Recession Continued in Play, Despite Bloated GDP Detail.** Irrespective of the minimally-stronger-than-expected 2.08% annualized, quarterly real growth in the revised headline reporting of fourth-quarter 2016 GDP, underlying reality remained that broad U.S. economic activity never recovered fully from its crash into 2009, and that it began to turn down anew in December 2014. Those circumstances are reviewed extensively in today's *Opening Comments* and in the *Executive Summary* and in the *ECONOMY* section of *No. 859 Special Commentary*.

Weakest Annual GDP Growth Since the Recession. With negligible upside revisions to the fourth-quarter 2016 GDP detail, conditions generally remained worse than expected coming into the initial reporting for the quarter, back at the end of January. In nominal terms, before inflation adjustment, annual change for the GDP in 2016 was a revised 2.95%, down from 3.70% in 2015. The 2016 nominal growth pace for the GDP was the weakest since the annual contraction of 2.09% (-2.09%) in 2009, which was the trough year of the economic collapse. In real terms, adjusted for inflation, annual change for the GDP in 2016 revised to 1.62%, down from 2.60% in 2015. The 2016 real growth pace effectively was tied with 2011 (1.60%) as the weakest showing since the annual contraction of 2.78% (-2.78%) in 2009.

Heavily Followed but of Extremely Poor Quality. In this most-politically-sensitive of popularly followed economic series, the GDP does not reflect properly or accurately the changes to the underlying economic fundamentals and measures that drive the broad economy. Discussed in the Opening Comments, various separately-reported measures of real-world economic activity have shown that the general economy began to turn down in 2006 and 2007, plunged into 2009, entered a protracted period of stagnation thereafter—never recovering fully, never entering a phase of economic Expansion—and then began to turn down anew in late-2014 (see graphs in the Executive Summary and in the ECONOMY section of No. 859 Special Commentary).

The GDP (or the broader GNP detail headlined in earlier decades) simply remains the most worthless of the popular government economic series, in terms of determining what really is happening to U.S. business activity. The series is the most-heavily-modeled, politically-massaged and gimmicked government indicator of the economy. It has been so since at least the 1960s, and that reporting quality deteriorated anew, sharply in 2016 benchmarking (see the *Opening Comments* of *Commentary No. 823*).

#### Notes on GDP-Related Nomenclature and Definitions

For purposes of clarity and the use of simplified language in the text of the GDP analysis, here are definitions of several key terms used related to GDP reporting:

**Gross Domestic Product (GDP)** is the headline number and the most widely followed broad measure of U.S. economic activity. It is published quarterly by the Bureau of Economic Analysis (BEA), with two successive monthly revisions, and with an annual revision in the following July.

**Gross Domestic Income (GDI)** is the theoretical equivalent to the GDP, but the popular press generally does not follow it. Where GDP reflects the consumption side of the economy and GDI reflects the offsetting income side. When the series estimates do not equal each other, which almost always is the case, since the series are surveyed separately, the difference is added to or subtracted from the GDI as a "statistical discrepancy." Although the BEA touts the GDP as the more accurate measure, the GDI is relatively free of the monthly political targeting the GDP goes through.

**Gross National Product (GNP)** is the broadest measure of the U.S. economy published by the BEA. Once the headline number, now it rarely is followed by the popular media. GDP is the GNP net of trade in factor income (interest and dividend payments). GNP growth usually is weaker than GDP growth for net-debtor nations. Games played with money flows between the United States and the rest of the world tend to mute that impact on the reporting of U.S. GDP growth.

**Real** (or **Constant Dollars**) means the data have been adjusted, or deflated, to reflect the effects of inflation.

**Nominal** (or **Current Dollars**) means growth or level has not been adjusted for inflation. This is the way a business normally records revenues or an individual views day-to-day income and expenses.

GDP Implicit Price Deflator (IPD) is the inflation measure used to convert GDP data from nominal to real. The adjusted numbers are based on "Chained 2009 Dollars," as introduced with the 2013 comprehensive revisions, where 2009 is the base year for inflation. "Chained" refers to the substitution methodology, which gimmicks the reported numbers so much that the aggregate of the deflated GDP sub-series missed adding to the theoretically-equivalent deflated total GDP series by \$105.5 billion in "residual," as of the second estimate of second-quarter 2016.

**Quarterly** growth, unless otherwise stated, is in terms of seasonally-adjusted, annualized quarter-to-quarter growth, i.e., the growth rate of one quarter over the prior quarter, raised to the fourth power, a compounded annual rate of growth. While some might annualize a quarterly growth rate by multiplying it by four, the BEA uses the compounding method, raising the quarterly growth rate to the fourth power. So a one percent quarterly growth rate annualizes to 1.01 x 1.01 x 1.01 x 1.01 = 1.0406 or 4.1%, instead of  $4 \times 1\% = 4\%$ .

**Annual** growth refers to the year-to-year change of the referenced period versus the same period the year before.

*Gross Domestic Product (GDP)*. Published this morning, March 30th, by the Bureau of Economic Analysis (BEA), the third estimate of, second revision to fourth-quarter 2016 GDP showed a minimally, upside-revised, statistically-insignificant, real (inflation-adjusted), annualized, quarterly headline gain of 2.08% +/- 3.5% (95% confidence interval), previously 1.86%, initially 1.88%. Distribution of the revised fourth-quarter 2016 GDP growth by major category is detailed in the *Executive Summary*. The current headline detail remains in the context of the July 29, 2016 annual GDP benchmark revisions discussed in *Commentary No.* 823 and is subject to no further monthly revisions before the next round of annual GDP benchmarking scheduled for July 28, 2017.

The third estimate of fourth-quarter GDP growth came in slightly above consensus expectations of 2.0%, at a continuing still-not-credibly-positive pace of headline activity. The revised headline fourth-quarter 2016 annualized real growth of 2.08% followed gains of 3.51% in third-quarter 2016, 1.42% in second-quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

Fourth-quarter growth was dominated by an even-greater involuntary buildup in inventories, gains in construction, vehicle sales and state- and local-government spending, heavily offset by an even greater deterioration in the trade deficit than reported last month. Fourth-quarter 2016 Final Sales (GDP net of inventory change) grew at a revised annualized real quarterly pace of 1.07% [previously 0.92%, initially previously 0.88%], versus 3.02% in third-quarter 2016.

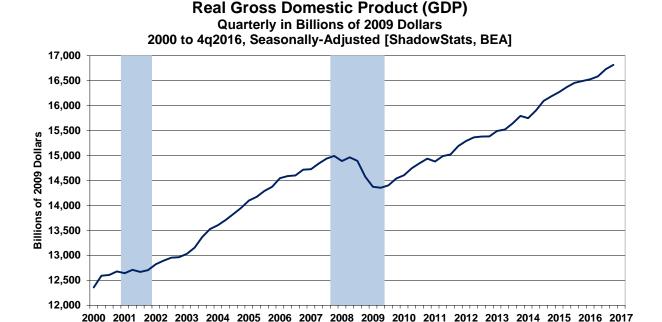
*Graphs 23* and 25 plot headline levels of real quarterly GDP activity, respectively showing short-term (since 2000) and long-term (since the historical onset of the quarterly GDP series in 1947) perspectives. *Graph 27* shows the level of annual real GDP activity, as estimated beginning in 1929.

Shown in *Graphs 24* and 26, headline year-to-year real GDP growth in fourth-quarter 2016 rose to a revised 1.96% [previously 1.90%, initially 1.91%], versus 1.65% in third-quarter 2016, 1.28% in second-quarter 2016, 1.57% in first-quarter 2016, and 1.88% in fourth-quarter 2015. Through second-quarter 2016 reporting, real annual growth had been in a continual slowing pattern since the near-term peak of 3.31% in first-quarter 2015, the post-recession high annual growth for the series. A sharp downtrend in annual growth is common at the onset of formal recessions. Shown in *Graph 28*, annual-average real GDP growth in 2016 slowed to a revised 1.62% [previously and initially 1.60%], versus 2.60% in 2015, effectively tied with 2011 for slowest pace of annual growth in the post-2009 "recovery."

The current-cycle trough in quarterly annual change was in second-quarter 2009 (see *Graphs 24* and 26), reflecting a year-to-year decline of 4.09% (-4.09%). That was the deepest year-to-year contraction for any quarterly GDP in the history of the series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail). *Graph 24* shows current year-to-year quarterly detail, from 2000-to-date, where *Graph 26* shows the same series in terms of its full quarterly, year-to-year history back to 1948. In annual terms (*Graph 16*), the year-to-year decline of 2.78% (-2.78%) in 2009 was the steepest regular annual drop in economic activity since the Great Depression. The 1946 production shutdown and economic reorganization following World War II, however, resulted in an annual GDP decline of 11.58% (-11.58%), minimally narrower than the 1932 annual economic crash of 12.89% (-12.89%).

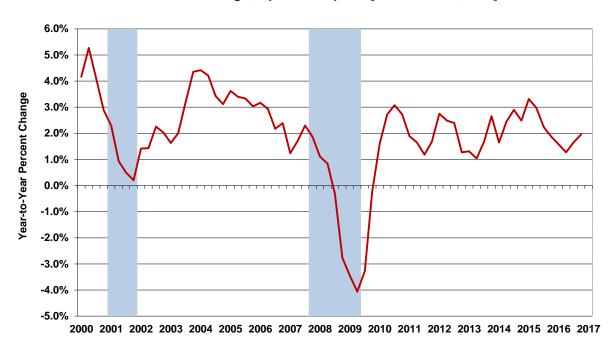
[Graphs 23 to 28 begin on the next page]

Graph 23: Quarterly GDP in Billions of 2009 Dollars (2000 to 2016), Third Estimate of Fourth-Quarter 2016

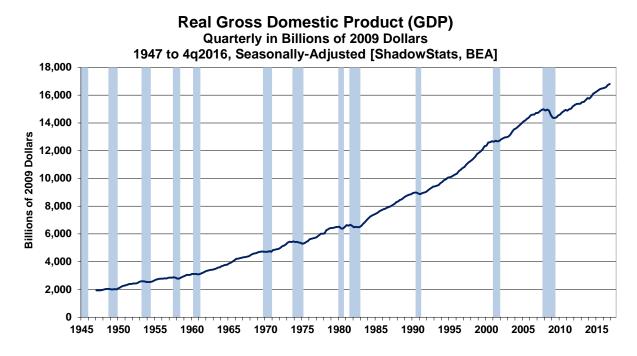


Graph 24: Quarterly GDP Real Year-to-Year Change (2000 to 2016), Third Estimate of Fourth-Quarter 2016

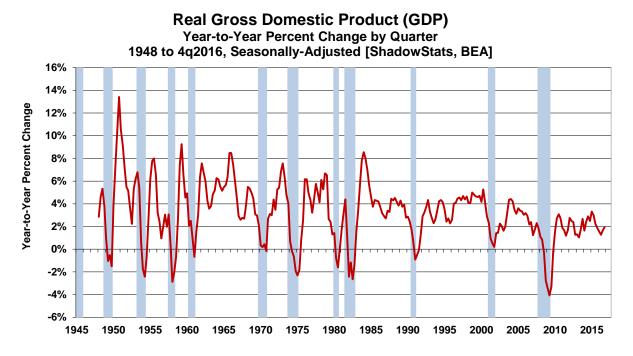
### Quarterly Real Gross Domestic Product Year-to-Year Change, 1q2000 to 4q2016 [ShadowStats, BEA]



Graph 25: Quarterly GDP in Billions of 2009 Dollars (1947-2016), Third Estimate of Fourth-Quarter 2016

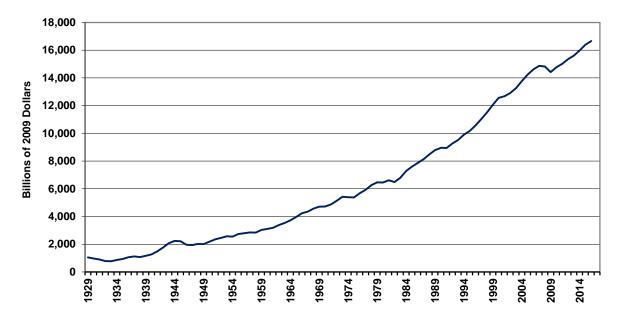


Graph 26: Year-to-Year GDP Real Change (1948-2016), Third Estimate of Fourth-Quarter 2016



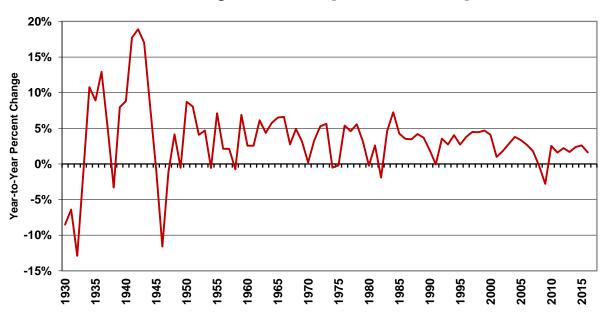
Graph 27: Annual GDP in Billions of 2009 Dollars (1929-2016), Includes Third Estimate of Fourth-Quarter 2016

### Annual Real Gross Domestic Product Level in Billions of 2009 Dollars, 1929 to 2016 [ShadowStats, BEA]



Graph 28: GDP Real Annual Percent Change (1930-2016), Includes Third Estimate of Fourth-Quarter 2016

### Annual Real Gross Domestic Product Percent Change, 1930 to 2016 [ShadowStats, BEA]



*Implicit Price Deflator (IPD)*. The third estimate of fourth-quarter 2016 GDP inflation, or the implicit price deflator (IPD), showed a revised annualized quarterly change of 2.10% [previously 2.02%, initially 2.12%], versus an annualized 1.41% in third-quarter 2016, 2.29% in second-quarter 2016, 0.46% in first-quarter 2016, 0.91% in fourth-quarter 2015, 1.22% in third-quarter 2015, 2.25% in second-quarter 2015 and 0.04% in first-quarter 2015.

As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth, and vice versa. The upside movement in the second-estimate of fourth-quarter 2016 IPD of 0.08% tended to mute the upside revision in the third estimate of real fourth-quarter GDP from 1.86% to 2.08%.

Year-to-year, the headline fourth-quarter 2016 IPD inflation revised to 1.56% [previously 1.54%, initially 1.57%], versus 1.27% in third-quarter 2016, 1.22% in second-quarter 2016, 1.21% in first-quarter 2016, 1.10% in fourth-quarter 2015, 1.00% in third-quarter 2015, 1.11% in second-quarter 2015 and 1.10% in first-quarter 2015.

In terms of year-over-year, average annual inflation, the 2016 IPD inflation was a revised 1.30% [previously 1.31%, initially 1.32%], versus 1.08% in 2015 and 1.79% in 2014.

For purposes of comparison, and in the context of annual revisions to seasonal adjustments, the seasonally-adjusted Consumer Price Index CPI-U rose by an annualized revised 3.04% [previously 3.44%] in fourth-quarter 2016, versus 1.78% [1.63%] in third-quarter 2016, 2.33% [2.53%] in second-quarter 2016, 0.11% [previously down 0.31% (-0.31%)] in first-quarter 2016, a 0.35% [0.77%] gain in fourth-quarter 2015, 1.50% [1.38%] gain in the third quarter 2015, 2.35% [2.44%] gain in second quarter 2015 and a quarterly contraction of 2.52% (-2.52%) [2.86% (-2.86%)] in first quarter of 2015.

Unadjusted and unrevised, year-to-year quarterly CPI-U inflation showed annual gains of 1.80% in fourth-quarter 2016, 1.12% in third-quarter 2016, 1.05% in second-quarter 2016, 1.08% in first-quarter 2016, 0.47% in fourth-quarter 2015, 0.11% in third-quarter 2015, and contractions of 0.04% (-0.04%) in second-quarter 2015 and 0.06% (-0.06%) in first-quarter 2015.

In terms of year-over-year, average annual inflation, the 2016 CPI-U inflation was 1.26%, versus 0.12% in 2015 and 1.62% in 2014 (see prior *Commentary No. 862* and *Commentary No. 866*).

Gross National Product (GNP) and Gross Domestic Income (GDI). The first estimates of fourth-quarter GNP and GDI were published along with today's release of the third estimate of fourth-quarter GDP. That year-end delay is standard, a circumstance due to quality issues with the available "advance" and second estimates of year-end data, a problem also specifically common to the headline GDP reporting.

GNP remains the broadest measure of U.S. economic activity, where GDP is GNP net of trade flows in factor income (interest and dividend payments). As a reporting gimmick aimed at boosting the headline reporting of economic growth for net-debtor nations such as the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of what had become a relatively weaker GNP. Headline, annualized real fourth-quarter 2016 GNP growth came in at 2.88%, versus 3.38% in third-quarter 2016. Year-to-year, fourth-quarter 2016 real growth was 2.09%, versus 1.71% in third-quarter 2016. For all of 2016, annual real GNP growth was 1.60%, versus 2.33% in 2015.

GDI is the theoretical income-side equivalent to the consumption-side GDP estimate. The GDP and GDI are made to equal each other, every quarter, with the addition of a "statistical discrepancy" to the GDI-side of the equation. Fourth-quarter 2016 GDI rose at an annualized pace of 1.00%, versus 5.01% in third-quarter 2016. Year-to-year, fourth-quarter 2016 real growth was 1.86%, versus 1.98% in third-quarter 2016. For all of 2016, annual real GDI growth was 1.64%, versus 2.52% in 2015.

Increasingly touted by the BEA as *the* GDP counterpart, the regularly-unstable GDI has been bloated heavily by effectively-worthless income reporting out of the Bureau of Labor Statistics (BLS). The purported income gains have reflected heavily-upside-biased income estimates out of the otherwise-rigged nonfarm payroll survey. Reflecting those instabilities, the nominal "statistical discrepancy" between the headline level of GDP minus GDI narrowed to -256.8 billion dollars in fourth-quarter 2016, versus -304.7 billion dollars in third-quarter 2016.

*ShadowStats-Alternate GDP*. The ShadowStats-Alternate GDP fourth-quarter 2016 GDP estimate is a year-to-year contraction of 1.8% (-1.8%), unchanged versus the revised headline second estimate of a fourth-quarter 2016 annual real headline GDP gain of 1.9%. That circumstance was against a ShadowStats 1.9% (-1.9%) annual-decline estimate for third-quarter 2016, versus the official headline annual gain of 2.0% in third-quarter 2016 GDP.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the unrevised statistically-insignificant, annualized, headline quarter-to-quarter gain of 2.1% in fourth-quarter 2016 was much weaker, net of all the happy assumptions, regular reporting gimmicks and any short-term political gaming coming into the headline detail. Actual quarterly contractions appear to have been a realistic possibility for inflation-adjusted GDP in most quarters since the official, second-quarter 2009 end to the 2007 recession.

Adjusted for understated inflation and other methodological changes—such as the inclusion of intellectual property, software and recent accounting for the largely not-measurable and questionable impact of the Affordable Care Act (ACA)—the business collapse that began in 2006/2007 is ongoing; there has been no meaningful economic rebound, as discussed in today's *Opening Comments and Executive Summary*. The "corrected" real GDP *Graphs 16* and *18* in the *Executive Summary* (see also the *ECONOMY* section in *No. 859 Special Commentary* and *2014 Hyperinflation Report—Great Economic Tumble*), are based on the removal of the impact of hedonic quality adjustments that have reduced the reporting of official annual GDP inflation by roughly two-percentage points. It is not the same measure as the ShadowStats-Alternate GDP, here, which reflects reversing additional methodological distortions ("Pollyanna Creep") of recent decades.

#### WEEK, MONTH AND YEAR AHEAD

Continuing Economic Woes Promise a Still-Compromised, Frustrated Fed and Deteriorating U.S. Dollar Support. The outlook for future FOMC activity was reviewed in the *Opening Comments* of *Commentary No. 873*, while the latest assessment of current economic activity is found in today's *Commentary* as well as in prior *Commentary No. 875*, *Commentary No. 874*, with a broad outlook outlined in *No. 859 Special Commentary*.

As reflected in common experience, actual U.S. economic activity generally continues in economic stagnation or downturn, never having recovered fully its level of pre-economic-collapse (its pre-2007-recession peak). While the latest headline GDP shows economic expansion of 12.2% since that series recovered its 2007-pre-recession high in 2011, no other "recovered" economic series has come close to showing that expansion either in terms of magnitude or in the purported brevity of the depression. Most of the better-quality series have remained in continuing, not-recovered status, in a period of protracted downturn that now rivals that of the Great Depression (see *Commentary No. 869*). With new signals for intensifying, near-term economic woes in hand, the FOMC shortly should shift policies, once again, reverting to some form of quantitative easing, in an effort to address related, intensifying solvency risks in the domestic banking system.

Discussed in *No. 859 Special Commentary*, the Trump Administration faces extraordinarily difficult times, but has a chance to turn the tide on factors savaging the U.S. economy and on prospects for long-range U.S. Treasury solvency and for stability and strength in the U.S. dollar. Any forthcoming economic stimulus faces a nine-month to one-year lead-time, before it meaningfully impacts the broad economy. Needed at the same time are a plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control, and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (again, see *No. 859*).

*Prior General Background.* No. 859 Special Commentary also updated near-term economic and inflation conditions, and the outlook for same, including the general economic, inflation and systemic distortions evolving out of the Panic of 2008 that have continued in play, and which, again, need to be addressed by the new Administration in the immediate future (see also the *Hyperinflation Watch* of Commentary No. 862 and Commentary No. 869).

Contrary to the official reporting of an economy that collapsed from 2007 into 2009 and then recovered strongly into ongoing expansion, underlying domestic reality remains that the U.S. economy started to turn down somewhat before 2007, collapsed into 2009 but never recovered fully. While the economy bounced off its 2009 trough, it entered a period of low-level stagnation and then began to turn down anew in December 2014, a month that eventually should mark the beginning of a "new" formal recession (see *General Commentary No.* 867).

Coincident with and tied to the economic crash and the Panic of 2008, the U.S. banking system moved to the brink of collapse, a circumstance from which U.S. and global central-bank policies never have

recovered. Unwilling to admit its loss of systemic control, the Federal Reserve has been making loud noises of continuing to raise interest rates, in order to contain an overheating economy. As this ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face unprecedented debasement with a resulting runaway domestic inflation.

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: <u>Commentary No. 869</u>, <u>No. 777 Year-End Special Commentary</u> (December 2015), <u>No. 742 Special Commentary: A World Increasingly Out of Balance</u> (August 2015) and <u>No. 692 Special Commentary: 2015 - A World Out of Balance</u> (February 2015). Those publications updated the long-standing hyperinflation and economic outlooks published in <u>2014 Hyperinflation Report—The End Game Begins</u> – First Installment Revised (April 2014) and <u>2014 Hyperinflation Report—Great Economic Tumble</u> – Second Installment (April 2014). The two Hyperinflation installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the <u>Public Commentary on Inflation Measurement</u> and the <u>Public Commentary on Unemployment Measurement</u>.

#### **Recent Commentaries:**

<u>Commentary No. 875</u> assessed and clarified formal definitions of the U.S. business cycle, which have been expanded upon significantly in today's *Opening Comments*. It also provided the standard review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight Index<sup>TM</sup>.

Commentary No. 874 reviewed February 2017 Industrial Production and updated the economic outlook.

<u>Commentary No. 873</u> discussed prospects for future tightening and/or a return to quantitative easing by the FOMC, along with a review of the February 2017 Residential Construction reporting.

<u>Commentary No. 872</u> offered some initial comment on the FOMC rate hike, in conjunction with the review of February 2017 Retail Sales (real and nominal), Real Earnings and the CPI and PPI.

<u>Commentary No. 871</u> covered February Labor Conditions, updated Consumer Liquidity and the ShadowStats Ongoing M3 Measure for February 2017, and a revised FOMC outlook.

<u>Commentary No. 870</u> assessed the headline details for the January 2017 Trade Deficit and January Construction Spending, and reviewed prospects for an FOMC rate hike on March 15th.

<u>Commentary No. 869</u> reviewed and assessed underlying economic reality and a broad variety of indicators in the context of the second-estimate of fourth-quarter 2016 GDP.

<u>General Commentary No. 867</u> assessed mixed signals for a second bottoming of the economic collapse into 2009, which otherwise never recovered its level of pre-recession activity. Such was in the context of contracting and faltering industrial production that now rivals the economic collapse in the Great Depression as to duration. Also covered were the prior January 2017 New- and Existing Home Sales.

<u>Commentary No. 864</u> analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.

<u>Commentary No. 861</u> covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government's fiscal 2016 operations. The GAAP-detail will be reviewed this month in a *Special Commentary*.

*No.* 859 *Special Commentary* reviewed and previewed economic, financial and systemic developments of the year passed and the year or so ahead.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate inflation and to overstate economic activity—as generally viewed in the common experience of Main Street, U.S.A.—ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments.

Data instabilities—induced partially by the still-evolving economic turmoil of the last eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). That issue is discussed and explored in the labor-numbers related <u>Supplemental Commentary No. 784-A</u> and <u>Commentary No. 695</u>.

Further, discussed in <u>Commentary No. 778</u>, a heretofore unheard of spate of "processing errors" surfaced in 2016 surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. That construction-spending issue now appears to have been structured as a gimmick to help boost the July 2016 GDP benchmark revisions, aimed at smoothing the headline reporting of the GDP business cycle, instead of detailing the business cycle and reflecting broad economic trends accurately, as discussed in <u>Commentary No. 823</u>.

Combined with ongoing allegations in the last year or two of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see *Commentary No. 669*). John Crudele of the *New York Post* continues his investigations in reporting irregularities: *Crudele Investigation*, *Crudele on Census Bureau Fraud* and *John Crudele on Retail Sales*.

**PENDING RELEASE:** Construction Spending (February 2017). The Commerce Department will release its estimate of February 2017 construction spending on Monday, April 3rd. Detail will be covered in the ShadowStats *Commentary No.* 878 of April 4th. As usual, headline monthly changes should not be statistically-significant. Irrespective of almost perpetually-positive market expectations for this series, the detail generally should continue in flat-to-downtrending stagnation, particularly in real terms, net of inflation.

**U.S. Trade Deficit** (**February 2017**). The Commerce Department and Bureau of Economic Analysis (BEA) will release their full version of the monthly U.S. trade balance for February 2017 on Tuesday, April 4th, covered in ShadowStats *Commentary No. 878* of that date. The full version of the February

2017 deficit will revise the often worthless "advance" estimate in merchandise trade, which showed a significant narrowing of the month-to-month goods deficit, as released March 28th. To the extent that the "advance" number has any credibility, the deficit narrowed due to reduced imports, which reflected weakening U.S. consumption of consumer goods. Where the second-revision to fourth-quarter GDP just showed some further trade deterioration in the fourth-quarter deficit, the general trend of a deteriorating trade balance still should be in place for first-quarter 2017 and beyond, despite any near-term narrowing in the limited "advance" detail for February.

**Employment and Unemployment (March 2017).** The Bureau of Labor Statistics (BLS) will publish its headline March 2017 labor data on Friday, April 7th, covered in the ShadowStats *Commentary No. 879* of that date. Both the more-inclusive unemployment-rate numbers, as well as the headline payroll-employment details, are open for negative headline surprises, given the ongoing, general stagnant-to-weakening tone in a number of the better business indicators.

*Underlying Reality Remains to the Downside of Expectations.* In the context of recent the extreme volatility and inconsistencies in payroll and unemployment detail, almost anything remains within possible BLS reporting. Underlying reality remains a much weaker-than-expected economy, which increases the odds of negative surprises to the headline reporting of both the payroll and household-survey detail, against what likely will be relatively neutral-to-positive consensus expectations.

**PENDING SPECIAL COMMENTARIES:** *GAAP-Based Accounting of the U.S. Government* (*Fiscal-Year 2016*). With some preview in *Commentary No. 861* and *No. 859 Special Commentary*, full analysis remains a work in progress and should be published shortly.

The consolidation of the major *ShadowStats* reporting into one volume, including the recommended reading list remains targeted for late- April.