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

ShadowStats Benchmark Commentary, Issue No. 1459

Redefined, Revamped and Revised Money Supply – Fully Updated Tables and Graphs; Massive Annual Growth Distortions Ahead in Jobs, GDP, Money Supply, Etc., Against Year-Ago Pandemic Shutdown

April 21, 2021

Intractable and Deteriorating Conditions Still Signal No Imminent Economic Recovery, Irrespective of Some Bounces in March Activity Against Weather-Driven February Collapses

Monthly Annual and Post-Pandemic Payroll Declines Have Stabilized Around Minus Six-to-Seven Percent for the Last Eight Month, Weakest Showing Since 1946

Annual-Change Gyrations Are Just Beginning for Economic, Inflation, Money Supply and Financial Return Numbers, as the Pandemic-Driven Collapse Passes It First Anniversary

Beyond Year One, Multi-Year, Crisis-Driven Collapses Need to Be Assessed Against Pre-Crisis Levels, or Stacked Two-Year Change, As Well As Year-to-Year Change

The Federal Reserve Overhauled Its Money Supply Reporting, Redefining Traditional M1 from 34.8% to 93.4% of a Not-Redefined Total M2

This Masked Accelerating Flight-to-Liquidity in Traditional M1 from Non-M1 Components of M2

ShadowStats Defined "Basic M1" -- Combined Currency and Demand Deposits -- Still Reflects the Extraordinary Liquidity Flight to, and Surge in the Narrower Money Supply

Expanded Federal Reserve Accommodation Remains Likely Well Into 2023, Given the Increasingly Negative Outlook for Imminent U.S. Economic Recovery

Fed Chair Powell Noted That Surging Money Supply No Longer Boosts the Economy

That Is Because the Current Collapse Is Pandemic, Not Business-Cycle Driven; Surging Money Growth in a Non-Business-Cycle Collapse Can Trigger Hyperinflation

Surging Monetary Base, Reserves and Currency Indicate Intensifying Systemic Problems

Underlying Fundamentals Remain Extremely Strong for Gold and Silver, and Weak for the U.S. Dollar and Stocks, Despite Central Bank or Other Systemic Machinations to the Contrary

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Note to Subscribers

Evolving Circumstances and *ShadowStats Commentaries.* Today's *Special Benchmark Commentary, Issue No. 1459* reviews unusual changes to the Federal Reserve's Money Supply as to structure and redefinitions, reporting frequency and benchmark revisions, along with year-to-year change issues tied to Pandemic-disrupted numbers—ranging from employment to the Money Supply and Monetary Base numbers—as they pass the first anniversary of the Pandemic shutdown. Today's missive will be followed early next week by regular *Economic Commentary, Issue No. 1460*, which will update and review the latest economic reporting and financial-market circumstances, as covered usually in a *Flash* or regular *Economic Commentary.* Economic, Pandemic and political circumstances broadly continue to evolve negatively under the Biden Administration, despite continued advances in COVID-19 vaccinations and treatments. *Special Benchmark Commentary, Issue No. 1461* should publish over the May 1st weekend, providing a broad review of the economy, inflation and the financial markets, with an updated *ShadowStats Outlook* into 2022 and beyond. Specifically covered will be accelerating movement towards a U.S. hyperinflationary economic collapse, along with an updated assessment of domestic political and Pandemic circumstances, as they affect the economy and markets.

Where the broad **ShadowStats Outlook** continues to evolve, again, it has not changed dramatically. The general themes and elements of the outlook for the U.S. economy, inflation and financial markets, including extreme Federal Reserve Monetary and Federal Government Fiscal Policies, continue to foreshadow rapidly escalating risk of a **Hyperinflationary Depression**. The Pandemic already has inflicted lingering, massive structural damage and upheaval on the United States' economy and on the lives and psyche of its people. Intensifying, hidden economic damage from the Pandemic likely will continue to surface well into 2022. One can hope that circumstances increasingly will stabilize, as the vaccines and treatments begin to tame the Pandemic and help to restore some confidence to the public and business outlook. Nonetheless, continuing major, expansive Federal Reserve Monetary Policies are being hyped into 2023, with continuing expansive new Federal Government spending already in place and expanding, with such stimulus likely needed well into 2022 and beyond. Increasing risks of a hyperinflationary economic collapse by the end of 2021, early 2022 remain uncomfortably high. — **WJW**

Pending ShadowStats Coverage and Publication Schedules: Please regularly review the <u>DAILY</u> <u>UPDATE</u> Section (right hand column) of the <u>SHADOWSTATS HOME PAGE</u>. It highlights coincident economic and other market-sensitive news, as well as the planned ShadowStats publication schedule and revisions to same. Covered are rapidly shifting headlines, reporting details, intervening events, unusual developments in the markets, with the FOMC or the economy, and ShadowStats scheduling. Initial economic assessments in the DAILY UPDATE, usually follow within a couple hours of official posting of new release, and tend to preview pending COMMENTARY comments.

General background to the current *ShadowStats Outlook* includes key economic, market and systemic assessments of the last year or two, including *Special Commentary*, *Issue No. 1429* (FOMC Panic), *Special Commentary*, *Issue No. 1430* (Systemic Solvency), *Flash Commentary*, *Issue No. 1433* (Retail Sales Benchmarking), *Flash Commentary No. 1434* (1q2000 GDP), *Special Economic Commentary*,

<u>Issue No. 1437</u> (Economic Update), <u>Special Hyperinflation Commentary, Issue No. 1438</u> (Risks of a Hyperinflationary Economic Collapse), <u>Flash Commentary No. 1439</u> (Distorted May Labor Conditions, NBER Recession Call, FOMC Outlook), <u>Economic Commentary, Issue No. 1441</u> (Economic Update).

Consider as well, Special Economic Commentary, Issue No. 1444, which examined Systemic, Economic and Financial-system disruptions, particularly as reflected in the price of Gold. *Flash Commentary*, Issue No. 1445 reviewed the GDP annual benchmarking and an updated outlook for Gold and Silver following the August 11th sell-off. Special Economic Commentary, Issue No. 1446 assessed current and prospective economic and inflation conditions, with initial *ShadowStats* GDP forecasts for the balance of 2020. Flash Commentary, Issue No. 1447 reviewed and updated ongoing statistical shenanigans with the New Claims for Unemployment Insurance for the week ended August 29th, and assessed economic implications of the August 2020 Payrolls and Unemployment and Employment reporting, along with the July 2020 Merchandise Trade Deficit. *Flash Commentary*, *Issue No. 1448* reviewed the New Claims for Unemployment, August 2020 CPI- and PPI-Inflation and the Money Supply. *Flash Commentary, Issue* No. 1449 reviewed developments from the September 2020 FOMC Meeting, with Flash Commentary, Issue No. 1450 covering the Third-Quarter 2020 GDP and related unfolding economic circumstances. Flash Commentary, Issue No. 1451 updated the November FOMC, along with Flash Commentary, Issue No. 1452, Economic Commentary, Issue No. 1453, Issue No. 1454, Issue No. 1455, Issue No. 1456, Issue No. 1457 and the most-recent Issue No. 1458, updating recent economic and inflation numbers, FOMC actions and evolving U.S. political and Pandemic circumstances.

ShadowStats Broad Outlook for the Economy, Inflation and the Markets

In context of continuing extreme Fiscal and Monetary Stimuli against the still-evolving COVID-19 crisis and Systemic Shutdown, the *ShadowStats* broad outlook in the weeks and months ahead remains for:

- A continuing and potentially hyperinflationary U.S. economic collapse, with significant bottom bouncing and an unfolding, troubled and protracted "L"-shaped non-recovery, reflected in
- Continued flight to safety in precious metals, with accelerating upside pressures on gold and silver prices, likely headed for new record high levels, irrespective of any temporary Central Bank or other market interventions, machinations or corrections to the contrary,
- Continued mounting selling pressure on the U.S. dollar, against the Swiss Franc and other, more-stable currencies, as broadly measured against the ShadowStats Financial-Weighted Dollar (FWD) and the Federal Reserve's Trade-Weighted Advanced-Foreign-Economies (AFE) Dollar.
- Despite recent extreme Stock Market volatility and current record or near-record high levels in the popular U.S. stock-market indices, ongoing high risk of major instabilities and a pending massive liquidation of U.S. equities,
- Complicated by ongoing direct, supportive market interventions arranged by the U.S. Treasury Secretary, as head of the President's Working Group on Financial Markets (a.k.a. the "Plunge Protection Team"), and/or as otherwise gamed by the FOMC.

Your questions and comments always are welcomed. Please call or e-mail me any time. Leave a message if your call goes to Voicemail. I shall be back to you.

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OVERVIEW

Beware Volatile March 2021 Year-to-Year Changes, as Pandemic-Driven Economic, Systemic and Financial-Market Collapses and Turmoil Move Beyond Their One-Year Anniversaries

The Economy and Inflation Are Not Unfolding Well, Despite Gains in March 2021 Numbers, Against Bad-Weather-Collapsed February Activity

The Federal Reserve Overhauled Money Supply Definitions and Reporting, Along With Some Tap Dancing

The Day Following the December 2020 FOMC, Redefinition of Money Supply M1 Was Announced, Tempering Headlines of Runaway Money Supply Growth

Excessive Money Growth Invites Hyperinflation in an Economy Collapsed by Factors Outside of the Regular Business Cycle

Alternative to the Old, Traditional M1, February 2021 "Basic M1," Composed of Currency and Checking Account Deposits, Surged Year-to-Year by a Record 69.6%

Fed Chairman Powell Found Himself Dodging "Pending Inflation" Questions at His March 2021 FOMC Press Conference

March 2021 Producer Prices Exploded, with Record Annualized First-Quarter 2021 Inflation of 9.0% in Aggregate, 16.0% in Goods and 5.6% in Services

March 2021 Consumer Prices Soared, with Gasoline Prices Surging Meaningfully to Above Pre-Pandemic and Pre-Oil Price War Levels

Pandemic-Disrupted Annual Reporting of the Economy and Markets, and the Federal Reserve's Overhaul and Redefinition of the Money Supply and Reporting of Same. Today's *Benchmark Commentary No. 1459* first reviews approaches to assessing comparative economic numbers during an extended period of economic downturn or collapse—in excess of one year—such as seen currently with the Pandemic-driven Economic Collapse and related Oil Price War, which hit hard in March 2020. Second, it reviews and assesses the impact of the Federal Reserve's redefinitions of the Money Supply, particularly from the standpoint of inflation concerns and perceptions, along with new, more-restrictive and delayed timing of what now have become monthly, instead of weekly, data releases.

HANDLING PANDEMIC DISRUPTED ECONOMIC AND FINANCIAL MEASURES

February 2020 Is the Most Commonly Recognized Month for the Pre-Pandemic Peak or Trough Activity, in Series Ranging from Payrolls to the Monetary Base; Headline March 2021 Year-to-Year Growth Rates Are Heavily Skewed Against Alternative Measures. There are several approaches to assessing comparative economic numbers during an extended period of economic downturn or collapse—in excess of one year—such as seen currently with the Pandemic-driven Economic Collapse and the related Oil Price War, which initially hit the system hard in March 2020. The effect here is that comparative March 2021 data are skewed heavily against year-ago numbers. The current Pre-Pandemic Peak or Trough Activity, broadly recognized as February 2020, can serve as a benchmark for determining the ongoing scope and economic impact of the Pandemic. That said, the February 2020 Pre-Pandemic Benchmark Standard can vary from January to March of 2020, tied to special circumstances.

Year-to-Year Percent Change in March 2021 Activity, Against Percent Change in March 2021 from Pre-Pandemic Peak or Trough Activity. Examples of disruptive annual growth impact, surfaced in early-April reporting of March 2021 Payroll Employment and the Monetary Base. To the credit of both the Bureau of Labor Statistics (Payrolls) and the Federal Reserve (Industrial Production), at present they use the comparison of current headline activity against the Pre-Pandemic Benchmarks, for reporting clarity of current relative economic conditions in their Press Releases, as opposed to the more-traditional comparisons of year-to-year change, against year-ago activity.

Year-to-Year Decline in March 2021 Payrolls Narrowed to 4.5% (-4.5%) from 6.6% (-6.6%) in March 2020, but Was Down 5.5% (-5.5%) from the February 2020 Pre-Pandemic Peak; April 2021 Payrolls Could Jump 10.8% Year-to-Year, but Still Decline by 5.4% (-5.4%) from the Pre-Pandemic Peak. Detailed in Section I are Graphs 2 to 7 of the latest March 2021 and prospective April 2021 Payroll Employment metrics, from the standpoint of the level of employment, year-to-year change (March 2021 vs. March 2020), stacked two-year change (March 2021 vs. March 2019) and the headline percentage change of the current level of activity against the Pre-Pandemic Peak.

Year-to-Year Growth in the Monetary Base Weakened, as the Latest Monthly Detail Surged Against the Pre-Pandemic Trough. Indeed, in the other direction, aggregate activity also has increased above pre-Pandemic levels, yet with relative negative hits to annual changes in series such as the Monetary Base, where the surging March 2021 Monetary Base was higher versus its Pre-Pandemic Trough of February 2020, yet it slowed year-to-year against March 2020, thanks to the Fed's initial actions to boost the Monetary base at that earlier time. Year-to-year change, annual growth in the unadjusted March 2021 Monetary Base slowed to 50.3%, from 57.7% annual growth in February 2021 against February 2020 (also the pre-Pandemic trough). Yet, that same level of the March 2021 Monetary Base surged by 69.0% against that February 2020 pre-Pandemic trough. See *Graphs 27* to 38, beginning on page 44, covering the Monetary Base and its Reserve Balances and Currency components.

Details as to Weather and Pandemic Disrupted Growth Patterns in March 2021 Real Retail Sales, Industrial Production, Building Permits and the Cass Freight Index®, Follow in No. 1460. Among the headline March 2021 economic releases of the last week, consider the positive boosts to year-to-year growth in headline Industrial Production, against post-Pandemic collapses. Headline year-to-year change in March 2021 Industrial Production turned positive for the first time in 18 months, up year-to-year by 1.0% against March 2020, yet March 2021 Production held down by 3.4% (-3.4%) from its February 2020 pre-Pandemic peak, and held down by 3.7% (-3.7%) in its two-year stacked change against March of 2019. Circumstances for the just-released March 2021 Retail Sales, Industrial Production, Housing

Starts and the Cass Freight Index® will be reviewed and graphed fully in pending *Economic Commentary No. 1460*. Initial details on these series are available temporarily in the *DAILY UPDATE* section on the *www.ShadowStats.com* home page.

First- and Second-Quarter, and Annual 2021 GDP Should Continue to Soften Against Strengthening Expectations. On the economic front, minimally and upwardly revised forecasts for yearend 2021 Gross Domestic Product (GDP) came out of the March 2021 FOMC Meeting. Despite that, and despite temporary March 2021 activity bounces, following a broad and intense mid-First-Quarter 2021 thrashing given to February 2021 activity by severe weather, First- and Second-Quarter 2021 (and fullyear 2021) GDP likely will come in below consensus expectations.

The latest March 2021 Payroll Employment activity remained severely constrained, despite some relative annual boost from year-ago Pandemic-driven changes, as detailed in *Section I*. Relative strength seen in some of those key monthly March economic numbers should prove to be fleeting, little more than exaggerated monthly rebounds from severe weather, which should stabilize at lower levels in April. Discussed in *Section I*, downside month-to-month surprises likely loom, despite heavily disrupted year-to-year boosts from Pandemic depressed numbers one year ago. Again, full regular coverage of the headline March 2021 Labor and Inflation numbers, Real Retail Sales, Industrial Production, Housing Starts and the Cass Freight Index® follows in pending *Economic Commentary No. 1460*.

As a separate matter, *ShadowStats* always reviews and publishes the latest headline economic reporting details on a near-coincident basis (usually within several hours of headline release). That is found in the current *Daily Update* section, right-hand column of the *www.ShadowStats.com* home page. Those economic reviews tend to highlight unusual features of the headline reporting, effectively previewing expanded coverage in subsequent *Commentaries*. Again, details of the March 2021 monthly numbers follow in *Economic Commentary No. 1460*, with the related ShadowStats longer-range economic and inflation outlooks updated in *Benchmark Commentary No. 1461* in the next week or two.

Section I, beginning on page 14, details **ShadowStats** approach to handling these headline growth developments for key series, going forward. Those approaches also are used in **Section III**, covering the March 2021 Monetary Base, incorporating information from both **Sections I** and **II**.

REVAMPED MONEY SUPPLY AGAINST SURGING INFLATION FEARS

Money Supply Revised Definitions and Reduced Reporting Frequency Have Decreased the Quality and the Flow of Monetary Information to the Public and to the Markets. Today's *Benchmark Commentary No. 1459* reviews and assesses second, the impact of the Federal Reserve's recent redefinitions of the Money Supply, along with new, more-restrictive and delayed timing of what now are monthly data releases, versus prior weekly detail and releases. The FOMC used an earlier regulatory "definitional" change to effective Savings Deposits liquidity (in M2)—eliminating Reserve Requirements as of May 2020—as the excuse for redefining the Money Supply M1. The redefinition of M1 was to move Savings Deposits into M1, from the Non-M1 components of M2. The effect of the series redefinition and delayed reporting has been to (1) Mask uncomfortably strong and accelerating headline annual growth patterns [an unprecedented 70% year-to-year gain in the final, "terminal" January 2021 estimate] in the headline reporting of traditional Money Supply M1, the narrowest and most liquid money

supply measure of the time, and to (2) Shift from weekly to monthly headline reporting of the series, eliminating weekly detail, and effectively delaying key monthly Monetary System information by two-to-three weeks. Nonetheless, the flight to liquidity and surging year-to-year growth in the narrow (and broader) Money Supply measures appear to continue and to accelerate, despite no apparent meaningful shift in the behavioral characteristics of the "increased-liquidity" Savings Deposits.

Surging Annual Growth in Money Supply M1 and Mounting Flight to M1 Liquidity from Non-M1 Components of M2, Might Have Triggered the Post-December FOMC Overhaul of the Money Supply. The reporting changes were announced the day following the December 2021 FOMC Meeting, with the new definitions and scheduling put into effect on February 23, 2021, along with the redefinitions of the data put in place retroactively to May 2020. Coming into the December FOMC Meeting, annual growth in the traditional Money Supply M1 was soaring (it hit 70% in its final, terminal January 2021 reporting), with funds flowing out of the Non-M1 components of M2, seeking the perceived greater liquidity of M1.

No. 1459 has taken much longer to produce than usual, due partially to evolving, underlying monetary and economic circumstances. For example, one month after introducing the redefined new Money Supply measures in February 2021, the Fed published an "annual" benchmark revision to that one-month-old new series, having published an "annual" benchmark revision to the prior, traditional series only a couple of months before that. I apologize for the delays, here, in what became unusually complex and shifting circumstances and proved otherwise to be an extraordinarily difficult **Commentary**. The resulting detail, however, should be of significance and value going forward.

The reporting issues reviewed here are important to understanding the ShadowStats approach to coverage of Economic and Inflation Reporting in the months ahead, and as to the unfolding outlook for U.S. Economic Activity, and particularly for Inflation, in the year ahead. Both the longer-term economic and inflation outlooks will be expanded upon later this month, in *Benchmark Commentary No. 1461*, with regular coverage and review of the monthly and weekly Economic, Inflation and Financial-Market numbers in pending *Commentary No. 1460*, again, likely over the pending weekend.

Federal Reserve's Overhaul of Its Money Supply Measures and Reporting. The day following the December FOMC Press Conference, the Federal Reserve announced an overhaul to Money Supply reporting, redefining Money Supply M1 from 32% to 93% of M2, moving Savings Deposits into M1 from the Non-M1 M2 Components (see Graph 9, page 25), while going to less-frequent and less current monthly reporting, from weekly reporting. With the redefinition of Money Supply M1 to incorporate Savings Deposits, the new headline M1 effectively became a much closer approximation of the broader Money Supply M2, mimicking its much muted annual growth behavior (see Graph 10, page 25). Instead of the old M1's annual growth rate of 69.7% (still accelerating at a record pace and level) in January 2021, in its final reporting, the newly redefined series showed what most consistently would have been year-to-year growth of 30.8% [despite, as discussed in Section II, what formally was an inconsistent 357%], and against what was then 25.9% for M2.

The Federal Reserve contended that since it had eliminated Bank Reserve Requirements in May 2020, Savings Deposits (then a major component of Non-M1 M2) had taken on the same liquidity characteristics as Demand Deposits (checking accounts) in M1, and most properly should be tallied in Money Supply M1 accounting, instead of the Non-M1 M2 accounting.

That said, there has been no obvious shift in Money Supply behavior due to the shift in Reserve Requirements. What has shifted is that the headline annual growth in the Redefined M1 effectively has been muted, approaching that of M2, with data viewed on something of a consistent basis, minimally tempering the appearance of runaway Money Supply growth. Publication of the M1 redefinition has been in a format that precludes a full reconstruction of the old, Traditional M1. Accordingly, ShadowsStats not only reviews and details this circumstance of the shifting Money Supply in *Section II*, but also reintroduces the original Money Supply concept as "Basic M1", which enables a consistent viewing of the still accelerating flight to liquidity from the revamped M1/M2 to the basic liquidity that was available (and still is) in the traditional M1 Money Supply measure: Currency plus Demand Deposits (Checking Accounts), still accounting for 81% of the pre-redefinition, Traditional Money Supply M1.

Revisions? Where recent PPI and CPI headlines showed spiking inflation, such was in the context of surging Money Supply growth in a Business Cycle collapsed by a Pandemic Shutdown, not by the regular drivers of the business or economic cycle. At the December 16, 2020, FOMC Press Conference, Traditional Money Supply M1 then was on track for unprecedented year-to-year growth of 52% in November 2020 (it hit 51.5%). It went on to hit 64.7% in December and 69.7% in its terminal, final January 2021 reporting.

At the same time, the all-encompassing M2 was on track to hit a more-muted record annual growth of 24.4% in November 2020, followed by 24.9% in December, 25.9% in January 2021 and 27.1% in February. Coincident with the above, flight capital from Non-M1 M2 noticeably was shifting to the greater liquidity available in Cash and Demand Deposits (checking accounts).

There is a reasonable chance that FOMC concerns over the accelerating headline hyper-annual growth in Money Supply M1, the obvious related flight to liquidity from Non-M1 M2 to M1, and related mounting inflation concerns in the markets, may have combined to trigger the Money Supply redefinitions and the scheduling shift from weekly to monthly Money Supply Releases, again, as announced the day following the December FOMC Press Conference. There's nothing like a little obfuscation of unwanted headlines.

High Velocity Money Supply in a Strong Economy Can Be Inflationary; Low Velocity Money Supply in a Non-Economic Collapse Can Be Hyperinflationary: Massive Money Supply Growth in an Artificially Constrained Economy—Such as a Pandemic-Driven Shutdown—Can Trigger Hyperinflation—Too Much Money Chasing Too Few Goods. Federal Reserve Chairman Jerome S. Powell indicated in recent Congressional Testimony that the Federal Reserve's extraordinary expansion of the Money Supply was not effective in stimulating current economic activity. That is the case, because the economy was collapsed by a government-ordered Pandemic shutdown, not by normally occurring or functioning business-cycle factors, which can be boosted or reversed separately by Monetary Policy.

Inflation pundits tout the high Velocity of Money (the pace at which the Money Supply turns over in the economy – GDP) as necessary for strong inflation. Such indeed can generate both strong economic activity and commensurate inflation rate in normal circumstances.

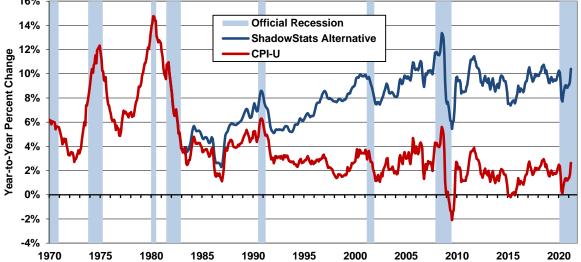
That said, the Federal Reserve has pumped, and continues to pump, rapidly expanding, record levels of Money Supply growth into an environment of largely collapsed, structurally impaired, nonresponsive low-level of business activity. The combination of an artificially reduced level of GDP activity and unfettered, surging Money Supply creation has generated a non-economically depressed, low level of the

Velocity of Money (again the pace at which the Money Supply turns over in the GDP). As a result, the Fed's hyper-monetary expansion in a shutdown economy is at risk of triggering a hyperinflation, with too much money chasing too few goods, phenomena increasingly seen in today's unstable circumstance, with irregular shortages in commodities ranging from lumber and meat to computer chips.

"Tap Dancing on a Landmine" – At His March FOMC Press Conference, Chairman Powell Did a Song and Dance as to How Higher FOMC Inflation Forecasts Did Not Mean Higher Inflation. It was difficult not to think of Aerosmith's Rag Doll¹ lyrics as Federal Reserve Chairman Jerome S. Powell danced around inflation questions at his most-recent March 17th FOMC Press Conference. Several members of the Press asked why the Fed was not considering a rate hike, where the updated inflation forecasts of Federal Reserve Board Members and Federal Reserve Bank Presidents (updated quarterly) showed upwardly revised, median estimates for year-end 2021, 2022 and 2023 of 2.4%, 2.0% and 2.1%. All were at or above the Fed's headline inflation target of 2.0% for the Core PCE Deflator. The "Core" PCE Deflator is the inflation rate for Personal Consumption Expenditure, the largest component—roughly 69%—of Gross Domestic Product (GDP), net of food and energy. The price deflators for the GDP and the PCE traditionally are understated massively, against common experience (see ShadowStats Special Commentary No. 968 and No. 983-B). That circumstance will be reviewed anew in pending Benchmark Commentary No. 1461, updating the ShadowStats long-range U.S. Economic and Inflation forecasts.

Graph 1: Consumer Price Index CPI-U versus the ShadowStats Alternate Inflation Measure to March 2021





¹ "**Rag Doll**" is a song by American rock band Aerosmith, from its 1987 album *Permanent Vacation*, written by Steve Tyler, Joe Perry, Jim Vallance and Holly Knight (Wikipedia).

Confirming and Inflaming Mounting Financial-Market Concerns as to Rising Prices, Recent Headline Inflation Has Turned Sharply Higher, Economic Activity Lower. Chairman Powell's response to issues of the boosted FRB inflation forecasts was along the lines that (1) those FRB estimates were just forecasts, and (2) that the involved phenomena were just temporary. That may be. Yet, subsequent headline inflation continues on the rise, as discussed here and detailed in pending Economic Commentary No. 1460, reviewing sharply rising inflation seen in both the February and March 2021 Producer Price Index (PPI) and the March 2021 Consumer Price Index (CPI).

Quarterly PPI Showed Record Inflation. Consider that the First-Quarter 2021 PPI-Goods Inflation, which should lead the CPI, in theory, showed its strongest, seasonally-adjusted quarterly gains in the history of the series (since 2009), reflecting surges in all three product elements of Energy, Food and "Core" (net of Food and Energy), as well as a record quarterly surge in the broadly mal-defined Services Sector, which treats rising gasoline prices as deflationary, because it reduces profit margins? Such a circumstance usually triggers price increases for services.

Gasoline Prices Have Surged to Multi-Year Highs, Well Above the February 2020 Pre-Pandemic and Pre-Oil Price War Peak Levels. March 2021 Consumer Prices showed an annual jump of 2.62%, up from 1.68% in February, their strongest gain since August 2018. Gasoline Prices hit multi-year highs, not seen otherwise since well before the March 2020 onset of both the Pandemic and the Oil Price War.

This Special Benchmark Commentary No. 1459 focuses on two areas key to meaningful assessments of the current economic, inflation and financial reporting. First is a general approach to measuring the shifting nature of relative activity during an extended period—in excess of one year—of economic disruption, such as just seen in the current Pandemic-driven circumstance, with March 2021 Payroll Employment and the Monetary Base; second is the nature of the changes to, and redefinitions of the U.S. Money Supply, along with implications for current reporting and unfolding, underlying conditions:

SECTION I: Handling Growth Comparisons in a Multi-Year Economic Collapse, beginning on page 14, looks at several examples of unfolding data distortions on a year-to-year basis, and some options for shifting analyses to potentially more consistent and meaningful, alternate measures. Full detail, by headline March 2021 economic series, follows in pending **Economic Commentary No. 1460**.

SECTION II: Monetary System Overhaul – Fed Redefines M1, Masking Meaningful Money Supply Behavior; ShadowStats "Basic M1" Restores Consistent Indication of Old-Definition Activity, beginning on page 20, reviews and assesses the Federal Reserve's recent revisions to its Money Supply definitions and reporting. Money Supply Definitions are detailed on page 23; Redefinitions are assessed, and the ShadowStats "Basic Money Supply M1" is introduced and explained, along with fully updated comparative Graphs 8 to 26, beginning on page 24, with an extended Table beginning on page 35...

SECTION III: March 2021 Monetary Base: Reserves and Currency in Circulation Continue to Spike, Suggesting Mounting Systemic Risks. Beginning on page 42, it combines elements of both Sections I and II, where imputed March 2021 monthly reporting (from still-available weekly reporting on the Federal Reserve's Monetary Base) reflects the latest Federal Reserve monetary numbers in the context of year-ago Pandemic disruptions to initial headline March 2020 activity.

[Section I begins on the next page.]

SECTION I: Handling Growth Comparisons in a Multi-Year Economic Collapse

Disrupted Annual Growth Patterns Have Begun to Surface

Viewing Distended Headline Data Against a Pre-Pandemic Peak or Trough, or Against a Stacked Two-Year Change, Often Provides a More-Stable Perspective Than Year-to-Year Change

Pre-COVID-19 Pandemic Peak (or Trough) Activity Broadly Has Been Timed from February 2020, or from Fourth-Quarter 2019—Related Disruptions to Headline Payroll Activity. Seasonally-adjusted Payroll Employment activity peaked pre-Pandemic in February 2020. The Bureau of Labor Statistics (BLS) drew its historic comparisons accordingly in its April 2nd Press Release covering March 2021 Nonfarm Payroll Employment activity, as it has done since its monthly release of May 2020 headline details on June 5, 2020:

Total **nonfarm payroll employment** increased by 916,000 in March but is down by 8.4 million, or 5.5 percent, from its pre-pandemic peak in February 2020.

The latest revised version of headline March 2020 Labor Numbers reflected an initial seasonally-adjusted monthly loss of 1.683 (-1.683) million jobs against the February 2020 Pre-Pandemic peak activity, followed by an unprecedented monthly collapse in April 2020, against March 2020, of 20.769 (-20.769) million jobs. Except for a 306,000 (-306,000) monthly Payroll decline in December 2020, seasonally-adjusted monthly Payroll changes have been positive since May of 2020, with March 2021 gaining 916,000 jobs, albeit with the March 2021 Payroll level still down by 5.51% (-5.51%) from recovering its Pre-Pandemic high, as noted above.

Where ShadowStats standardly has been reporting annual year-to-year change for the monthly Payroll numbers (and other economic series), consider that on a seasonally-adjusted, year-to-year basis, February 2021 Payroll Employment declined both year-to-year (vs. February 2020), and from its Pre-Pandemic high (vs. February 2020) by 6.11% (-6.11%), while March 2021 Payroll Employment declined by 5.51% (-5.51%) against its Pre-Pandemic high, due to its monthly gain. That said, its year-to-year decline for March 2021 narrowed to 4.46% (-4.46%), due to the year-ago initial Pandemic hit to the series, as reflected in *Graphs 2* to 5 (beginning page 17). A parallel analysis for the March 2021 Monetary Base—in context of the discussion in *Section III* on the *Monetary System Overhaul*—follows in *Section III* beginning on page 41.

Annual Disruption Looms for April Payrolls. Pending April 2021 Payrolls, in particular, will see wildly swinging headline annual change, specifically due to Pandemic disruptions to April 2020 activity, while April 2021 versus Pre-Pandemic levels would provide a more-consistent and meaningful picture. Assuming a seasonally adjusted 1,000,000 monthly jobs growth (close to the headline March gain), April 2020 Payroll employment would surge year-to-year by 11.5%, but that still would be down from the Pre-Pandemic peak activity in February 2020 by 4.9% (-4.9%), as reflected in *Graphs 6* and 7 on page 19.

Similar Conditions Have Arisen with Other March 2021 Economic Series in the Last Week. Similarly, the Federal Reserve Board noted with its April 15th release of headline March 2021 Industrial Production:

At 105.6 percent of its 2012 average, total **industrial production** in March was 1.0 percent higher than its year-earlier level, but it was 3.4 percent below its pre-pandemic (February 2020) level.

In that circumstance, the first positive monthly year-to-year change in 18 months was seen, up by 1.0%, yet aggregate production still was down by 3.4% (-3.4%) from its Pre-Pandemic Peak in February 2020. Full analysis and related graphs follow in *Economic Commentary No. 1460* not only for the March Production series, but also for March 2021 Retail Sales, New Residential Construction and the Cass Freight Index[®].

Measuring Economic Change in a Protracted Economic Collapse, Beyond the First Year's Anniversary. ShadowStats standardly has been reporting headline month-to-month and year-to-year percent changes for most economic series over the years, presenting a reasonably consistent history of regular reporting, up through the first anniversary of the pre-Pandemic peak or trough levels of February 2020, plus or minus. Where year-to-year change tells you how you are doing against last year, in particularly protracted and volatile downturns, such may be misleading as to overall broad conditions. Again, consider the proforma *Graphs 6* and 7 of what easily could the picture for April 2021 Payroll Employment.

Many March 2021 Economic, Monetary and Financial Market Series Face Related Reporting Distortions. The same year-to-year disruptive comparative issues, which boosted relative annual growth in March 2021 Payroll Employment, against the Pandemic-depressed March 2020 Payrolls, reviewed here as a basic example, also affected year-to-year disruptive comparative issues, variously inflating or depressing relative annual growth in March 2021, and in a number of months to come, until headline activity in the various series at least minimally recovers either its respective pre-Pandemic peak or trough activity.

Separately, in particularly protracted circumstances, such as with the still evolving "unofficial" recession triggered by Federal Reserve tightening late in 2018, the use of a two-year stacked change (March 2021 versus March 2019), as well as the annual year-to-year change (March 2021 versus March 2020), are used standardly in headline reporting of the Cass Freight Index[®], and in ShadowStats analysis of Industrial Production.

Focusing particularly on Pandemic disruptions and distortions, consider the March 2021 Monetary Base and Currency in Circulation numbers, as discussed and graphed in the *March 2021 Monetary Base and Currency Continue to Spike* section, beginning on page 41. In this circumstance, an early FOMC spike to March 2020 Monetary Base and Currency in Circulation growth, had the effect of depressing relative annual growth in the March 2021 readings of those Money Measures, a circumstance that also will tend to

suppress annual growth (but not growth versus pre-Pandemic peak activity) in the headline March 2021 Money Supply numbers.

Again, analysis of the most-recent headline reporting of the major March 2021 economic series, other than those already covered specifically in this missive, and as well as those going forward in time, as needed, broadly will be viewed from reporting several angles.

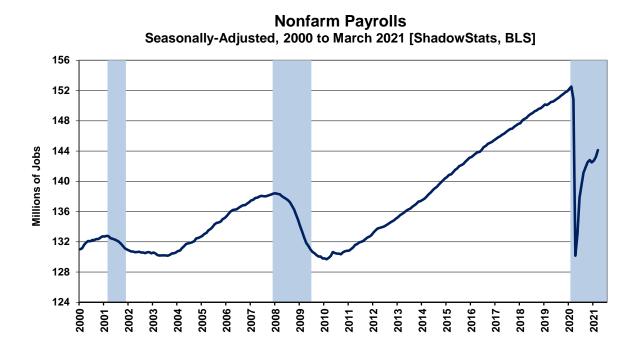
Handling Graphs of Pandemic-Affected Series, Post First Anniversary of the Respective Pre-Pandemic Peak or Trough. Reviewed and applied here to March 2021 Payroll Employment numbers (*Graphs 2 to 7*), and as applied in the later Monetary Base (*Section III*, again beginning page 41) *ShadowStats* will plot the various series disrupted by extended Pandemic distortions as follows:

- Graphs Showing Levels of Activity are not affected. The level of activity is the level of activity.
- Graphs Showing Year-to-Year Change will plot the headline year-to-year change to date, with the usual, regular red line, but also will show the Current Month's Percent Change vs. the Appropriate Pre-Pandemic High or Low Level with a black line.
- Longer-Term Graphs, plotted 2000-to-Date, also will be accompanied by Shorter-Term Graphs, plotted 2018-to date, showing:
 - The monthly headline level of activity and
 - The monthly percentage measure of:
 - o Year-to-year change
 - o Two-year stacked change [current month against the same month two years before]
 - o Change from the series' Pre-Pandemic peak or trough

Defining Economic Recovery. Depending on the economic or financial measure viewed, the pre-Pandemic relative monthly peak or trough in activity appears to range from January 2020 to March 2020, with a quarterly pre-Pandemic peak or trough likely at Fourth-Quarter 2019. Timing of relative economic peak activity is fundamental in terms of determining the onset of an economic downturn and an economic recovery from same. Economic Recovery usually is defined has having economic activity recovering its pre-Recession peak activity. Peak Activity before the Pandemic-driven recession was set at Fourth-Quarter 2019 by the National Bureau of Economic Research (NBER), when they declared the current recession. The Manufacturing Sector of Industrial Production still has not recovered its pre-Great Recession peak activity.

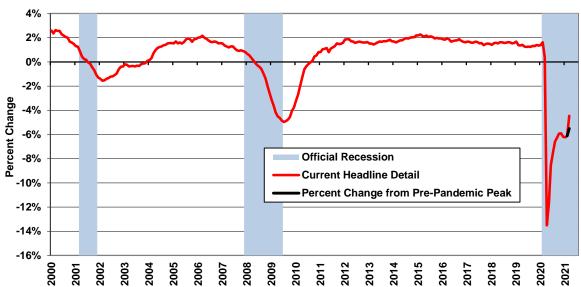
[Graphs 2 to 7, covering headline Payroll Employment activity and Pandemic disruptions to same, begin on the next page.]

Graph 2: Headline Payroll Employment Levels, 2020 to March 2021



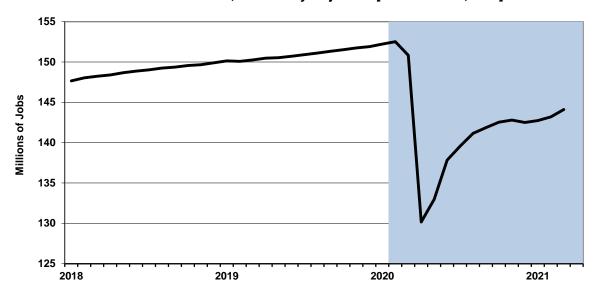
Graph 3: Payroll Employment Percent Changes, Yr-to-Yr and Against Pre-Pandemic Peak, 2020 to March 2021





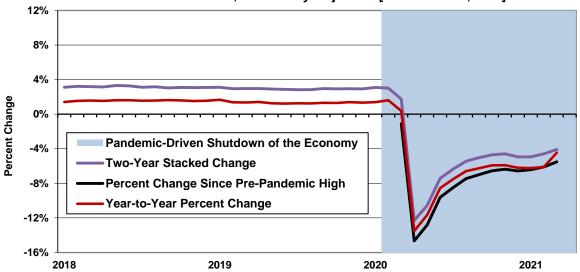
Graph 4: Headline Payroll Employment Levels 2018 to March 2021

Headline Payroll Employment (Millions) 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 5: Headline Payroll Employment - Various Percentage Change Measures 2018 to March 2021

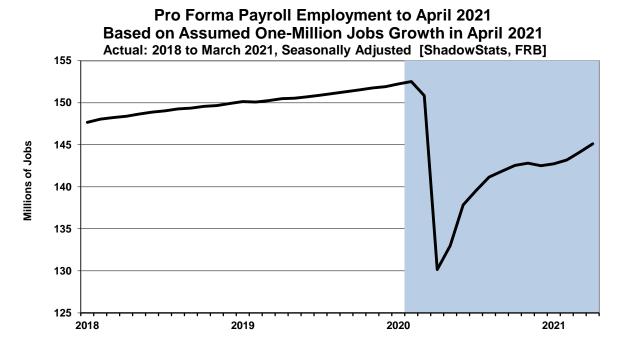
Headline Payroll Employment - Percent Changes to March 2021 Year-to-Year, Two-Year Stacked and Against Pre-Pandemic Peak 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



LOOK WHAT COULD HAPPEN TO APRIL 2021 PAYROLLS

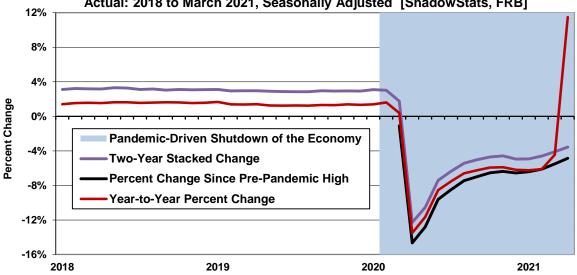
Pro Forma April 2021 Payrolls and Respective Growth Swings -Seasonally Adjusted Monthly Payroll Gain of 1,000,000 Jobs in April 2021 Would Show Annual Gain of 11.5%, Yet Still Be Shy by 4.9% (-4.9%) of Pre-Pandemic Peak

Graph 6: Pro Forma Headline Payroll Employment Levels to April 2021 with a One-Million Monthly Jobs Gain



Graph 7: Pro Forma Headline Payroll Employment — Various Percentage Change Measures to April 2021

Pro Forma April 2021 Payroll Employment - Percent Changes Year-to-Year, Two-Year Stacked and Against Pre-Pandemic Peak Based on Assumed One-Million Jobs Growth in April 2021 Actual: 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



SECTION II: Monetary System Overhaul – Fed Redefines M1, Masking Meaningful Behavior of Money Supply Liquidity Shifts

Recasting of M1 Muted Its Surging, Albeit Still-Record Annual Growth

ShadowStats "Basic M1" – Currency and Demand Deposits – Restores a Consistent Indication of Old-Definition M1 Activity

Day After the December 2020 FOMC, Money Supply M1 Largely Was Redefined as M2, Effective February 23, 2021, Restated Back to May 2020

Headline Reporting of Weekly Money Supply Detail Was Shifted to Delayed, Less-Informative Monthly Average Numbers

The Fed's Original Money Supply Concept, Call It "Basic M1," Remains a Subcomponent of the Newly Redefined, As Well As the Prior Headline M1

"Basic M1" Coverage Clarifies Pandemic-Distorted and Disrupted Trends, Highlighting Ongoing Unprecedented Monetary Expansion

Annual Money Supply Growth Continues at Historic Highs; February 2021 "Basic M1" at a Record 69.6%, up from 63.0% in January

Growth Surges in the March 2021 Monetary Base, Bank Reserves and Currency in Circulation Indicate Intensifying Systemic Problems

MONEY SUPPLY—As Announced the Day Following the December 2021 FOMC Meeting, the Federal Reserve launched new, redefined, monthly-only Money Supply M1 and M2 reporting on February 23, 3021 (restated back to the May 2020 detail), essentially eliminating prior Traditional M1-unique information, effectively masking it as M2. ShadowStats has launched an alternative "Basic M1" Money Supply, which maintains much of the information that was unique to M1. With the Fed effectively redefining M1 as M2, and with the latest March 23rd monthly reporting for February 2021 incorporating a second round of benchmark revisions, headline year-to-year change in just-redefined M1 technically hit 357.1% in February 2021 vs. a benchmark revised 350.9% in January, yet that annual comparison is inconsistent.

[The year ago data were of different component definition (no Savings Deposits), and will be so until May 2021. One could argue, though, that since the Savings Deposits liquidity, in theory, has only been consistent with M1 since May 2020, that the exaggerated annual growth was legitimate,]

That said, 32.1% annual growth in February 2021, versus 30.8% in January would be a more-consistent annual change for the traditional M1 plus the Savings deposits from prior definitions, but that will not be so reported until May 2021 data, again, when that headline monthly M2 reading is going against the formal series redefinition of May 2020.

As last reported, before the recent redefinition, the old Traditional M1 series in January 2021 was up by record 69.7%, but no hard estimate can be made for February 2021, since key underlying detail no longer is available.

As shown here in *Graph 10*, ShadowStats new "Basic M1" hit 69.6% in February vs. 63.0% in January (see the next paragraph)]. Despite the Fed's excuses for redefining M1 to include Savings tied to the May 2020 of Reserve Requirements, the old M2 components now added to the old M1, do not behave in a manner consistent with original M1.

Beyond the obfuscation of the newly redefined M1 in minimalizing the related prior liquidity-flow information of the old Money Supply Series, that information largely still is available from ShadowsStats' "Basic M1," which was the Federal Reserve's original Money Supply concept." The effect of the FOMC's M1 redefinition was to erase the appearance of what had been the increasing headline flow of Cash from Non-M1 M2 to M1, with liquidity-strapped Consumers and Businesses moving out of Savings (formerly not in M1) into Cash and Checking accounts. Pre-redefinition, M1 accounted for 28% of the Fed's aggregate Money Supply M2. Post-redefinition, M1 accounts for 93% of M2 and, as a result, reveals little more information than the does the aggregate M2 number, which was not redefined.

Welcome Back to the Core Money Supply, the Launching and Reintroduction of "Basic M1." Where much of the headline information from the old M1 has been masked by redefinitions, ShadowStats-defined "Basic M1" information still is available. ShadowStats has launched/reintroduced an alternative "Basic M1" Money Supply measure. Seven-plus decades ago, it was the original Money Supply measure: Currency plus Demand Deposits (checking accounts).

"In 1944 the Board of Governors of the Federal Reserve System began reporting monthly data on two types of exchange media, (1) currency outside of banks, and (2) demand deposits at banks, i.e., non-interest-bearing deposits transferable by check or convertible into cash "on demand." It also reported the sum of these two. The Board's expressed intent in reporting the data was "to increase the information available to the public on current changes . . . in the nation's money supply." In time, the sum of currency outside banks and demand deposits came to be called M1, the narrowest of the Fed's monetary aggregates. Until 1971 M1 was the only monetary aggregate for which estimates were published by the Board of Governors. In that year, however, the Board began reporting data for two additional aggregates, M2 and M3." ["Monetary Aggregates: A User's Guide," John R. Walter, <u>Federal Reserve Bank of Richmond, Economic Review, January /February 1989</u>]

The Board of Governors discontinued M3 in 2006. What became Money Supply M1 of recent years was redefined in December 2020, to include Savings Deposits, effective as of May 2020, first published

February 23, 2021. ShadowStats continued publishing M3 estimates on a monthly in February 2006, and is reintroducing the Federal Reserve's concept of "Basic M1," Currency plus Time Deposits.

At last reporting, "Basic M1" accounted for 79.4% of the Traditional M1, before its December 2020 redefinition and effective conversion to a new M2. Historic detail and graphs using "Basic M1," Historical and Redefined M2, and the M3/ShadowStats Ongoing M3 measures follow in *Graphs 8* to 26, beginning on page 24, with a supportive *Table* (headline monthly data January 2000 to February 2021) beginning on page 35, and Definitions of the Various Money Supply Measures again on page 23. The latest headline detail always is updated and posted to the <u>ALTERNATE TAB</u> of <u>www.ShadowStats.com</u>, as available

Federal Reserve's Liquidity Expansion continues to accelerate, with a record post-Pandemic surge in the Monetary Base, not seen since a Banking System Collapse drove the Great Recession. That was in context of a related, historic, record surge in Currency in Circulation, topping Fed Chairman Alan Greenspan's effort to avoid a Y2K Currency Crunch, as well as surging levels of Reserve Balances at Federal Reserve Bank, as discussed and graphed in *Section III*.

[Money Supply Definitions and Redefinitions begin on the next page.]

Money Supply M1, M2 and Ongoing M3 - Definitions and Redefinitions

Federal Reserve Board Money Supply Re-Definitions of February 23, 2021 with Supplemental ShadowStats.com Definitions and Notations

ShadowStats - MONEY SUPPLY "BASIC M1" (i + ii)

ShadowsStats Aggregation of "Basic" Money Supply – M1, is an aggregation of the current and prior traditional M1 components of Currency plus Demand Deposits (Checking Accounts). This was the Federal Reserve's initial Money Supply measure in 1948:

- i. Currency
- ii. Demand Deposits

FRB - MONEY SUPPLY - M1 - Redefined (i + ii + iii + iv)

- i. Currency
- ii. Demand Deposits (Checking Accounts)
- iii. Other Checkable Deposits Traditional M1
- iv. Savings Deposits from Previously Non-M1 M2

FRB - MONEY SUPPLY - Non-M1 M2 - Redefined

- v. Small Denomination Time Deposits
- vi. Retail Money Market Funds

FRB - MONEY SUPPLY – M2 = (i + ii + iii + iv + v + vi) – Unrevised in Aggregate

ShadowStats/FRB - MONEY SUPPLY - M3 ShadowStats Continuation after 2006 is MONEY SUPPLY - FRB M2 plus (vii + viii + ix)

- vii. Large Denomination Time Deposits
- viii. Repurchase Agreement Liabilities of Depository Institutions
- ix. Eurodollars

For extended definitional detail see:

FRB - https://www.federalreserve.gov/releases/h6/current/default.htm

ShadowStats - http://www.shadowstats.com/article/money-supply.pdf (reviews M3). Revised text, graphs and numbers with "Basic M1," otherwise is provided in this *Benchmark* Commentary No. 1459. Latest "Basic M1" numbers already are posted on the ShadowStats, Money Supply *ALTERNATE DATA TAB* of *www.ShadowStats.com** labeled as *Basic M1* in the accompanying Table and Data Download, with the accompanying Graphs temporarily showing *Basic M1* labeled as M1. The ShadowStats Money Supply Web pages and graphs are pending a comprehensive overhaul. The accompanying *Graphs** and *Tables** in this missive are updated fully with proper nomenclature, showing the comparative new ShadowStats "Basic M1," versus the new "Headline" or "Redefined M1," versus the pre-redefinition "Dormant" or "Traditional M1."

Schedule of Money Supply Graphs (Old, Revised and New) and Table

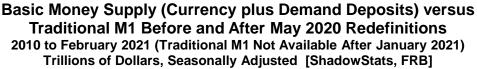
Comparative Traditional (Old) M1, Redefined M1 and ShadowStats "Basic M1" versus M2 and M3

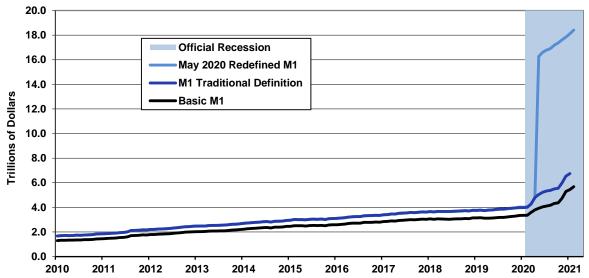
Graphs 8 to 12 of comparative Monthly Averages and Year-to-Year Change for the various M1 measures against each other and M2, begin at the bottom of this page.

Graphs 13 to 26 of the various Money Supply Series, January 1960 to Date, Monthly Average and Year-to-Year Change, begin on page 28. Coverage includes groupings of (1) New Headline M1, M2 and M3/ShadowStats Ongoing M3, and (2) ShadowStats "Basic M1," M2 and M3/ShadowStats Ongoing M3, and plots of monthly average level and year-to-year change for (3) ShadowStats "Basic M1," (4) the now "dormant" Traditional M1 series, (5) the redefined, current Headline M1, (6) M2 and (7) M3/ShadowStats Ongoing M3

Table - Historical Money Supply Data, Monthly, January 2000 to February 2021, in Trillions of Dollars and Year-to-Year Percent Change, begins on page 35. Coverage includes (1) ShadowStats "Basic M1," (2) M1 – DORMANT - Traditional M1 Until February 2021 Redefinition, (3) Current Headline M1, (4) M2, (5) M3/ShadowStats Ongoing M3.

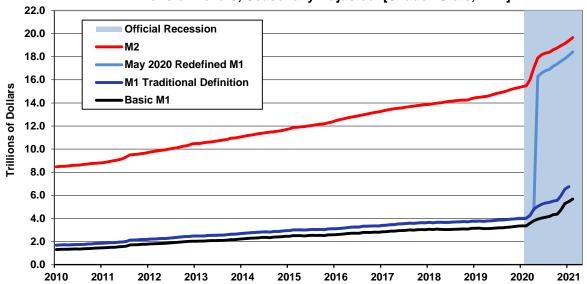
Graph 8: Basic M1 vs. Traditional and Redefined Money Supply M1 (2010 to February 2021)





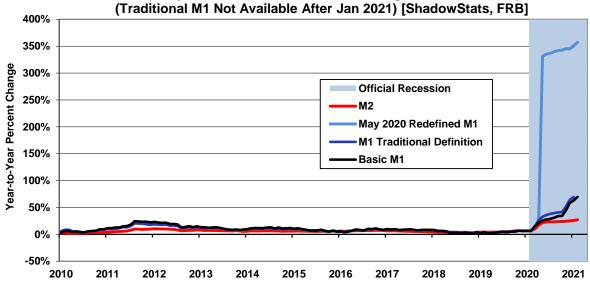
Graph 9: Basic M1 Money Supply, vs. Traditional and Redefined M1 and M2 (2010 to February 2021)

Basic Money Supply (Currency plus Demand Deposits) versus Traditional M1 Before and After May 2020 Redefinitions, and M2 2010 to February 2021 (Traditional M1 Not Available after January 2021) Trillions of Dollars, Seasonally Adjusted [ShadowStats, FRB]



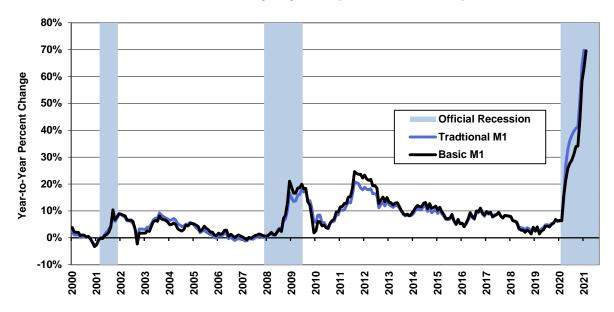
Graph 10: Basic M1 vs. Traditional and Redefined M1 and M2 Money Supply, Yr-to-Yr Change (2010 to Feb 2021)

Basic Money Supply (Currency plus Demand Deposits) versus Traditional M1 Before and After May 2020 Redefinitions and M2 Seasonally Adjusted, Year-to-Year Percent Change, 1960 to February 2021 (Traditional M1 Not Available After Jan 2021) [ShadowStats FRB]



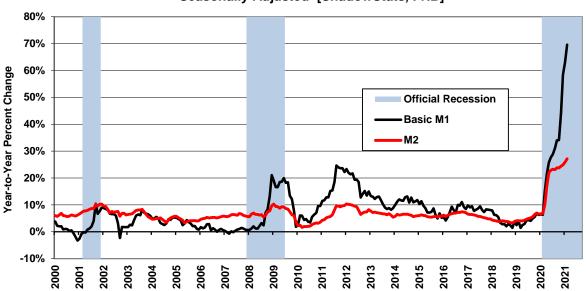
Graph 11: Traditional, Pre-Redefinition M1 versus Basic M1, Comparative Year-to-Year Change

Basic vs. Traditional M1 - Year-to-Year Percent Change 2000 to February 2021 (Traditional Not Available After January 2021) Seasonally Adjusted [ShadowStats, FRB]



Graph 12: Basic M1 Money Supply, Cash Plus Demand Deposits, vs. M2, Yr-to-Yr Change (2000 to Feb 2021)

Basic M1 (Currency plus Demand Deposits) versus M2 Year-to-Year Percent Change, 2010 to February 2021 Seasonally Adjusted [ShadowStats, FRB]



Money Supply Growth "Basic M1" Continues to Show a Shift from Traditionally Less-Liquid to More-Liquid Categories, Despite the Redefined Traditional M1. Dollar levels of the Money Supply M1 variations and M2 and M3 all hit consecutive record highs in February 2021, as did soaring year-to-year growth rates in the February 2021 M1 and M2 measures, amidst mounting Inflation fears, as reflected in *Graphs 2* to *4*. ShadowStats "Basic M1" year-to-year growth hit 69.6% in February vs. 63.0% in January, continuing to mirror a similar pattern seen previously in the old Traditional (now Dormant) Pre-Redefinition M1.

Annual growth in the Redefined M1 versus M2 should settle-in minimally above M2, come May 2021 and after. Annual change in the Fed's newly Redefined, headline February 2021 M1 hit 357.1% vs. 350.9% in January 2021, but those annual comparisons reflect inconsistent definitions, with the year-ago M1 excluding the now-Redefined more-liquid Savings Deposits. Where the post-May 2021 hyper-liquid Savings Deposits do not seem to have shifted their relative activity patterns much, more-consistent annual growth pattern comparisons at present likely would be 32.1% in February vs. 30.8% in January (measuring the OLD M1 plus savings deposits in January and February 2020 and 2021, although not so defined at the time).

When headline reporting of the Redefined M1 series advances to its May 2021 first anniversary of consistency and comparability with its initial redefinition, headline annual growth should plummet from the current, triple-digit percentage point inflation gains (when the year-ago M1 was 26.0% of M2 at the time), to something a couple of percentage points above the annual change in its now minimally larger M2 universe, with M1 currently comprising 93.6% of M2.

Annual growth in February 2021 M2 rose to an all-time high of 27.1%, up from 25.9% in January 2021. Annual growth in the February 2021 ShadowStats Ongoing M3 rose to 22.6% from 22.0% in January 2021. While such was against 26.1% peak annual growth in June 2020, the dollar level of February 2021 hit a new record level. Again, the annual change suggests increasing flight of money from less to greater liquidity. With annual year-to-year growth in M3 at 22.6%, versus 27.1% in M2, versus a more-consistent 32.1% [otherwise a maldefined 357.1%], versus 60.7% in Basic M1.

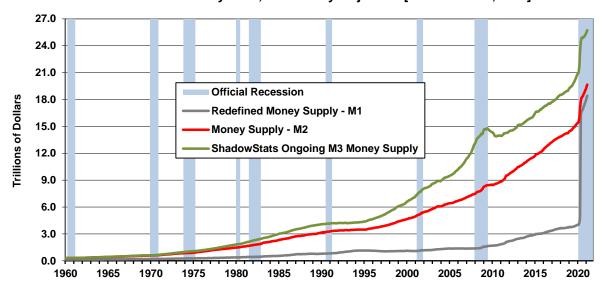
Against Year-Ago Upheaval, the Mary 2021 Monetary Base Growth Is Soaring, Having Shown Some Instabilities. Discussed in Section III (see page 41), alternative analysis and graphs handling year-to-year Pandemic disruptions in coverage of the March 2021 Monetary Base and Currency in Circulation suggest, surging annual growth in the ShadowStats "Basic M1."

[Money Supply Graphs 13 to 26 begin on the next page.]

Money Supply Series Graphed 1960 to Date

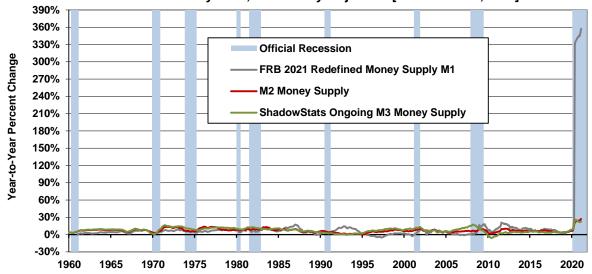
Graph 13: Headline Money Supply M1 (Redefined), M2 and M3 (1960 to February 2021)

February 2021 Money Supply New M1, M2 and M3 - \$Trillions M3 Estimate - Federal Reserve Board to 2006, ShadowStats Thereafter 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



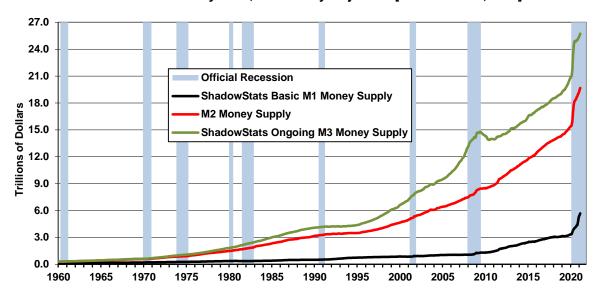
Graph 14: Headline M1, M2 and ShadowStats M3, Yr-to-Yr Change (1960 to February 2021)

February 2021 Headline Money Supply - Yr-to-Yr % Change M3 Estimate - Federal Reserve Board to 2006, ShadowStats Thereafter 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 15: Alternate Grouping - Money Supply Basic M1, M2 and M3 (1960 to February 2021)

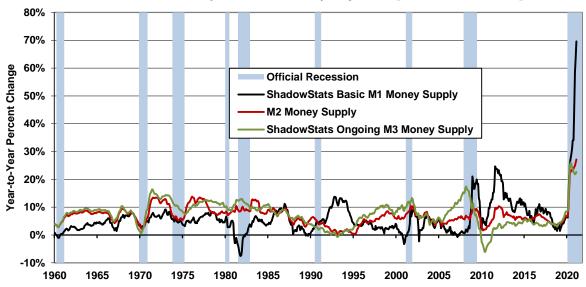
February 2021 Money Supply Basic M1, M2 and M3 - \$Trillions M3 Estimate - Federal Reserve Board to 2006, ShadowStats Thereafter 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 16: Basic M1, M2 and ShadowStats M3, Yr-to-Yr Change (1960 to February 2021)

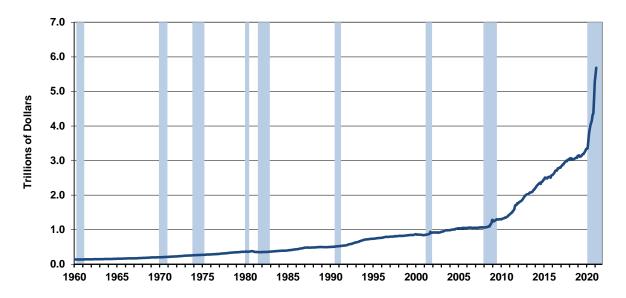
February 2021 Money Supply - Yr-to-Yr Percent Change Basic M1, M2 and ShadowStats Ongoing M3 M3 Estimate - Federal Reserve Board to 2006, ShadowStats Thereafter

1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



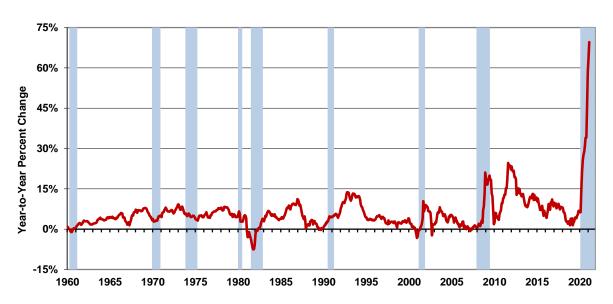
Graph 17: Basic M1 – Currency Plus Time Deposits (1960 to February 2021)

February 2021 Basic M1 Money Supply M1 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



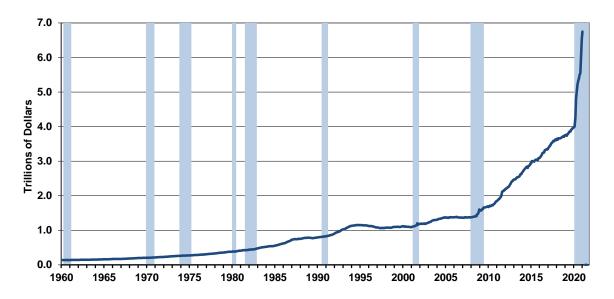
Graph 18: Basic M1 - Currency Plus Time Deposits, Year-to-Year Change (1960 to February 2021)

Basic M1 Money Supply - Year-to-Year Percent Change 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



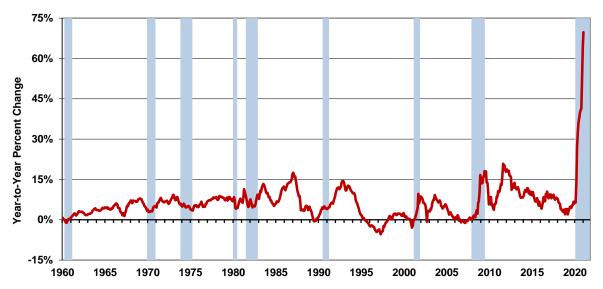
Graph 19: DORMANT Traditional Money Supply M1, Pre-2021 Redefinition (1960 to Final-January 2021)

Final January 2021 Traditional Money Supply M1 - Dormant 1960 to January 2021, Seasonally Adjusted [ShadowStats, FRB]



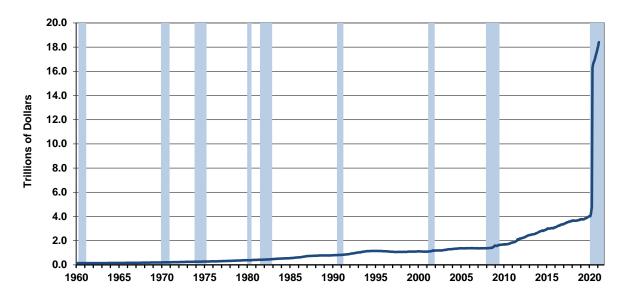
Graph 20: DORMANT Traditional Money Supply M1, Redefinition, Yr-to-Yr Change (1960 to Final-January 2021)

Traditional M1 Money Supply - Year-to-Year Percent Change 1960 to January 2021 (Final), Seasonally Adjusted [ShadowStats, FRB]



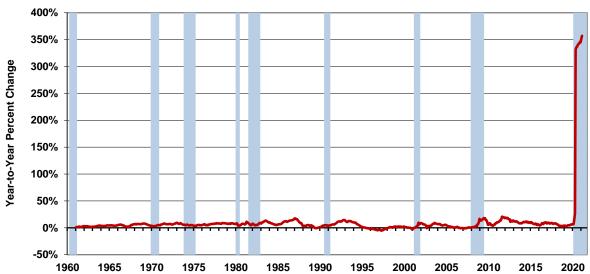
Graph 21: Redefined, Current Headline Money Supply M1 (1960 to February 2021)

February 2021 FRB Headline M1 Money Supply (Redefined) 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



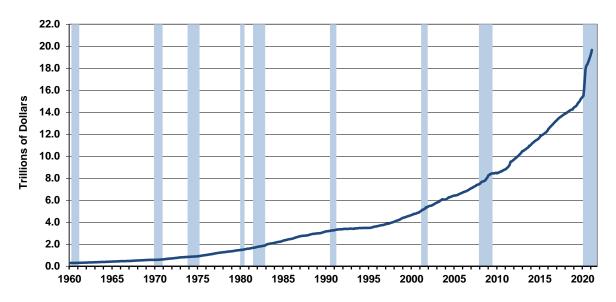
Graph 22: Redefined, Current Headline Money Supply M1 Year-to-Year Change (1960 to February 2021)

FRB Headline M1 Money Supply (Redefined) Year-to-Year Percent Change, 1960 to February 2021 Seasonally Adjusted [ShadowStats, FRB]



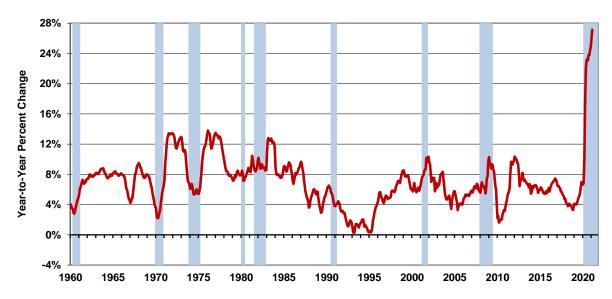
Graph 23: Money Supply M2 (1960 to February 2021)

February 2021 FRB M2 Money Supply 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



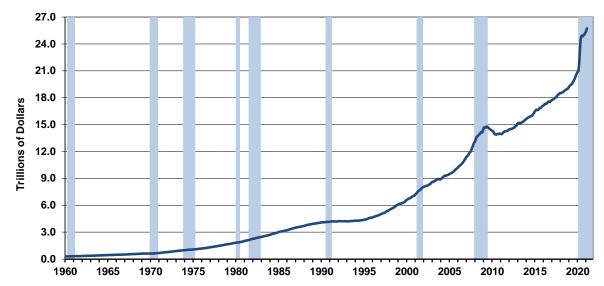
Graph 24: Money Supply M2 Year-to-Year Change (1960 to February 2021)

Money Supply M2 - Year-to-Year Percent Change 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



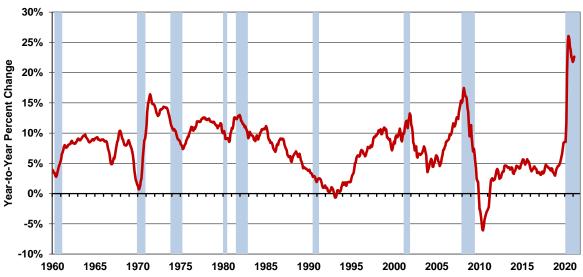
Graph 25: ShadowStats Ongoing Money Supply M3 Estimate (1960 to February 2021)

February 2021 Money Supply M3 - Trillions of Dollars FRB to Mar 2006, ShadowStats Continuation to Feb 2021 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 26: ShadowStats Ongoing M3 Estimate, Year-to-Year Change (1960 to February 2021)

Money Supply M3 - Year-to-Year Percent Change FRB to Mar 2006, ShadowStats Continuation to Feb 2021 1960 to February 2021, Seasonally Adjusted [ShadowStats, FRB]



[The Historical Money Supply Table, January 2000 to February 2021, begins on the next page.]

Historical Money Supply Data, Monthly, 2000 to February 2021

Money Supply Definitions are found on Page 23

Table: Various Money Supply Measures and Components, January 2000 to February 2021, Seasonally Adjusted

Money Supply M1, M2 and M3, Monthly January 2000 to February 2021

Basic M1 (Original Money Supply), Traditional M1 Until 2021 Redefinitions, Redefined M1 Effective May 2020; FRB Discontinued M3 in 2006, the ShadowStats Ongoing M3 Estimate Is Published Thereafter - All Series are Seasonally Adjusted

USED BY:	[1]		[2]		[3]			[4]		[5]	
ShadowStats	M1 - SHADOV	VSTATS	M1 - DO	RMANT	M1 - FRB			M2 - SHADOWSTATS		M3 - SHADOWSTATS	
FRB	Basic M	1	Traditio	nal M1	FRB Redefined M1,			Traditional M2		FRB M3 Dropped in	
Dormant	Currency	and	Until 20	21 FRB	Including Savings M2 - FRB		2006, ShadowStats				
	Demand De	posits	Re-Def	inition	Effective May 2020 Traditi		Tradition	nal M2	Estimate Th	nereafter	
Month	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %		\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %
2000 Jan	0.8712	3.84%	1.1222	2.19%	1.1222	2.19%		4.6669	5.99%	6.6167	8.62%
2000 Feb	0.8581	2.22%	1.1086	1.09%	1.1086	1.09%		4.6801	5.74%	6.6533	8.27%
2000 Mar	0.8572	2.01%	1.1075	0.99%	1.1075	0.99%		4.7108	6.27%	6.7150	9.31%
2000 Apr	0.8625	2.00%	1.1156	1.27%	1.1156	1.27%		4.7668	6.85%	6.7785	9.62%
2000 May	0.8547	0.81%	1.1049	0.10%	1.1049	0.10%		4.7546	5.99%	6.7884	9.29%
2000 Jun	0.8542	1.09%	1.1026	0.25%	1.1026	0.25%		4.7724	5.87%	6.8351	9.39%
2000 Jul	0.8557	0.98%	1.1035	0.40%	1.1035	0.40%		4.7900	5.62%	6.8868	9.66%
2000 Aug	0.8514	0.31%	1.1002	0.09%	1.1002	0.09%		4.8181	5.84%	6.9565	10.24%
2000 Sep	0.8517	0.53%	1.0997	0.29%	1.0997	0.29%		4.8538	6.25%	7.0151	10.75%
2000 Oct	0.8491	-0.48%	1.0987	-0.42%	1.0987	-0.42%		4.8697	6.04%	7.0385	10.15%
2000 Nov	0.8443	-1.86%	1.0924	-1.65%	1.0924	-1.65%		4.8806	5.84%	7.0499	8.86%
2000 Dec	0.8418	-3.29%	1.0886	-2.99%	1.0886	-2.99%		4.9252	6.18%	7.1291	8.63%
2001 Jan	0.8486	-2.59%	1.0967	-2.27%	1.0967	-2.27%		4.9758	6.62%	7.2487	9.55%
2001 Feb	0.8514	-0.78%	1.1012	-0.67%	1.1012	-0.67%		5.0141	7.14%	7.3200	10.02%
2001 Mar	0.8555	-0.20%	1.1089	0.13%	1.1089	0.13%		5.0719	7.67%	7.3835	9.96%
2001 Apr	0.8599	-0.30%	1.1167	0.10%	1.1167	0.10%		5.1359	7.74%	7.5193	10.93%
2001 May	0.8618	0.83%	1.1185	1.23%	1.1185	1.23%		5.1329	7.96%	7.5759	11.60%
2001 Jun	0.8647	1.23%	1.1262	2.14%	1.1262	2.14%		5.1732	8.40%	7.6566	12.02%
2001 Jul	0.8731	2.03%	1.1389	3.21%	1.1389	3.21%		5.2032	8.63%	7.7038	11.86%
2001 Aug	0.8857	4.03%	1.1502	4.54%	1.1502	4.54%		5.2371	8.70%	7.7082	10.81%
2001 Sep	0.9405	10.43%	1.2057	9.64%	1.2057	9.64%		5.3482	10.19%	7.8651	12.12%
2001 Oct	0.9059	6.69%	1.1657	6.10%	1.1657	6.10%		5.3368	9.59%	7.9097	12.38%
2001 Nov	0.9093	7.70%	1.1710	7.20%	1.1710	7.20%		5.3804	10.24%	7.9849	13.26%
2001 Dec	0.9175	8.99%	1.1832	8.69%	1.1832	8.69%		5.4335	10.32%	8.0473	12.88%
2002 Jan	0.9233	8.80%	1.1907	8.57%	1.1907	8.57%		5.4539	9.61%	8.0758	11.41%
2002 Feb	0.9232	8.43%	1.1906	8.12%	1.1906	8.12%		5.4833	9.36%	8.1212	10.95%
2002 Mar	0.9254	8.17%	1.1933	7.61%	1.1933	7.61%		5.4952	8.35%	8.1291	10.10%
2002 Apr	0.9178	6.73%	1.1869	6.29%	1.1869	6.29%		5.4955	7.00%	8.1546	8.45%
2002 May	0.9181	6.53%	1.1893	6.33%	1.1893	6.33%		5.5216	7.57%	8.1873	8.07%
2002 Jun	0.9218	6.60%	1.1933	5.96%	1.1933	5.96%		5.5466	7.22%	8.2031	7.14%
2002 Jul	0.9257	6.02%	1.1991	5.29%	1.1991	5.29%		5.5892	7.42%	8.2565	7.17%
2002 Aug	0.9131	3.09%	1.1871	3.21%	1.1871	3.21%		5.6316	7.53%	8.3103	7.81%
2002 Sep	0.9187	-2.32%	1.1961	-0.80%	1.1961	-0.80%		5.6560	5.76%	8.3438	6.09%
2002 Oct	0.9223	1.81%	1.2040	3.29%	1.2040	3.29%		5.7006	6.82%	8.3812	5.96%
2002 Nov	0.9248	1.70%	1.2096	3.30%	1.2096	3.30%		5.7507	6.88%	8.5111	6.59%
2002 Dec	0.9331	1.70%	1.2202	3.13%	1.2202	3.13%		5.7720	6.23%	8.5803	6.62%

MONEY SUPPLY DETAIL - M1, M2 and M3, page 2 of 6

USED BY:	[1]		[2]		[3]		[4]		[5]		
ShadowStats	M1 - SHADO	DWSTATS	M1 - DOI	M1 - DORMANT		M1 - FRB		M2 - SHADOWSTATS		M3 - SHADOWSTATS	
FRB	Basic	M1	Traditional M1		FRB Redefined M1,		Traditional M2		FRB M3 Dropped in		
Dormant	Currenc	y and		Until 2021 FRB		Including Savings		M2 - FRB		2006, ShadowStats	
	Demand [Deposits	Re-Defi	Re-Definition		Effective May 2020		Traditional M2		Estimate Thereafter	
Month	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillion	s Yr/Yr %	\$ Trillions	Yr/Yr %	
2003 Jan	0.9395	1.75%	1.2273	3.07%	1.2273	3.07%	5.804	5 6.43%	8.6003	6.49%	
2003 Feb	0.9472	2.60%	1.2382	4.00%	1.2382	4.00%	5.840	7 6.52%	8.6409	6.40%	
2003 Mar	0.9477	2.41%	1.2393	3.85%	1.2393	3.85%	5.861	5 6.67%	8.6610	6.54%	
2003 Apr	0.9584	4.42%	1.2500	5.32%	1.2500	5.32%	5.898	8 7.34%	8.6983	6.67%	
2003 May	0.9731	5.99%	1.2688	6.68%	1.2688	6.68%	5.959	2 7.93%	8.7545	6.93%	
2003 Jun	0.9810	6.42%	1.2810	7.35%	1.2810	7.35%	5.995	9 8.10%	8.8042	7.33%	
2003 Jul	0.9822	6.10%	1.2875	7.37%	1.2875	7.37%	6.042	6 8.11%	8.9013	7.81%	
2003 Aug	0.9874	8.14%	1.2964	9.21%	1.2964	9.21%	6.100	7 8.33%	8.9307	7.47%	
2003 Sep	0.9833	7.03%	1.2972	8.45%	1.2972	8.45%	6.072	7 7.37%	8.9191	6.89%	
2003 Oct	0.9842	6.71%	1.2978	7.79%	1.2978	7.79%	6.063	6 6.37%	8.9095	6.30%	
2003 Nov	0.9850	6.51%	1.2991	7.40%	1.2991	7.40%	6.068	8 5.53%	8.8930	4.49%	
2003 Dec	0.9883	5.92%	1.3062	7.05%	1.3062	7.05%	6.067	0 5.11%	8.8851	3.55%	
2004 Jan	0.9848	4.82%	1.3060	6.41%	1.3060	6.41%	6.075	5 4.67%	8.9430	3.98%	
2004 Feb	0.9948	5.03%	1.3214	6.72%	1.3214	6.72%	6.114	3 4.68%	9.0130	4.31%	
2004 Mar	1.0003	5.55%	1.3287	7.21%	1.3287	7.21%	6.150	0 4.92%	9.0933	4.99%	
2004 Apr	1.0050	4.86%	1.3328	6.62%	1.3328	6.62%	6.191	1 4.96%	9.1623	5.33%	
2004 May	1.0051	3.29%	1.3333	5.08%	1.3333	5.08%	6.267	9 5.18%	9.2567	5.74%	
2004 Jun	1.0091	2.86%	1.3427	4.82%	1.3427	4.82%	6.270	2 4.58%	9.2886	5.50%	
2004 Jul	1.0067	2.49%	1.3408	4.14%	1.3408	4.14%	6.283	9 3.99%	9.2956	4.43%	
2004 Aug	1.0184	3.14%	1.3543	4.47%	1.3543	4.47%	6.310		9.3273	4.44%	
2004 Sep	1.0297	4.72%	1.3625	5.03%	1.3625	5.03%	6.344		9.3648	5.00%	
2004 Oct	1.0275	4.40%	1.3623	4.97%	1.3623	4.97%	6.372		9.3724	5.20%	
2004 Nov	1.0373	5.31%	1.3742	5.78%	1.3742	5.78%	6.399		9.4081	5.79%	
2004 Dec	1.0407	5.30%	1.3760	5.34%	1.3760	5.34%	6.417		9.4459	6.31%	
2005 Jan	1.0360	5.20%	1.3671	4.68%	1.3671	4.68%	6.424		9.5001	6.23%	
2005 Feb	1.0414	4.68%	1.3711	3.76%	1.3711	3.76%	6.432		9.5445	5.90%	
2005 Mar	1.0423	4.20%	1.3708	3.17%	1.3708	3.17%	6.441		9.5782	5.33%	
2005 Apr	1.0293	2.42%	1.3584	1.92%	1.3584	1.92%	6.455		9.6340	5.15%	
2005 May	1.0365	3.12%	1.3660	2.45%	1.3660	2.45%	6.473		9.6782	4.55%	
2005 Jun	1.0532	4.37%	1.3801	2.79%	1.3801	2.79%	6.505		9.7385	4.84%	
2005 Jul	1.0428	3.59%	1.3690	2.10%	1.3690	2.10%	6.537		9.7756	5.16%	
2005 Aug	1.0494	3.04%	1.3780	1.75%	1.3780	1.75%	6.569		9.8778	5.90%	
2005 Sep	1.0510	2.07%	1.3786	1.18%	1.3786	1.18%	6.604		9.9641	6.40%	
2005 Oct	1.0493	2.12%	1.3766	1.05%	1.3766	1.05%	6.638		10.0454	7.18%	
2005 Nov	1.0482	1.05%	1.3759	0.12%	1.3759	0.12%	6.654		10.0918	7.27%	
2005 Dec	1.0489	0.79%	1.3743	-0.12%	1.3743	-0.12%	6.681		10.1672	7.64%	
2006 Jan	1.0536	1.70%	1.3795	0.91%	1.3795	0.91%	6.723		10.2559	7.96%	
2006 Feb	1.0543	1.24%	1.3784	0.53%	1.3784	0.53%	6.747		10.3619	8.56%	
2006 Mar	1.0592	1.62%	1.3832	0.90%	1.3832	0.90%	6.762		10.4046	8.63%	
2006 Apr	1.0583	2.82%	1.3814	1.69%	1.3814	1.69%	6.799		10.4793	8.77%	
2006 May 2006 Jun	1.0661 1.0586	2.86% 0.51%	1.3872 1.3754	1.55% -0.34%	1.3872 1.3754	1.55% -0.34%	6.806 6.844		10.5352 10.6191	8.86% 9.04%	
2006 Jul 2006 Jul	1.0566	1.32%	1.3754	0.25%	1.3754	0.25%	6.885		10.7263	9.04%	
2006 Jul 2006 Aug	1.0577	0.79%	1.3724	-0.41%	1.3724	-0.41%	6.916		10.7263	9.63%	
2006 Aug 2006 Sep	1.0512	0.75%	1.3644	-1.03%	1.3644	-1.03%	6.943		10.8294	9.77%	
2006 Sep 2006 Oct	1.0512	0.72%	1.3703	-0.46%	1.3703	-0.46%	6.992		11.0738	10.24%	
2006 Oct 2006 Nov	1.0592	1.05%	1.3708	-0.46%	1.3703	-0.46%	7.027		11.1947	10.24%	
2006 Nov 2006 Dec	1.0552	0.59%	1.3666	-0.56%	1.3666	-0.56%	7.027		11.3479	11.61%	
2000 DEC	1.0551	0.33/0	1.3000	-0.30/0	1.5000	-0.3070	7.070	, 3.03/0	11.34/3	11.01/0	

MONEY SUPPLY DETAIL - M1, M2 and M3, page 3 of 6

USED BY:	[1]		[2]		[3]		[4	l]	[5]	
ShadowStats	M1 - SHADOWSTATS		M1 - DORMANT		M1 - FRB		M2 - SHAD	OWSTATS	M3 - SHADOWSTATS	
FRB	Basic M1		Traditional M1		FRB Redefined M1,		Traditio	nal M2	FRB M3 Dropped in	
Dormant	Currency and		Until 2021 FRB		Including Savings		M2 - FRB		2006, ShadowStats	
	Demand D	eposits	Re-Definition		Effective May 2020		Traditional M2		Estimate Thereafter	
Month	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %
2007 Jan	1.0567	0.29%	1.3717	-0.57%	1.3717	-0.57%	7.1085	5.73%	11.4363	11.51%
2007 Feb	1.0519	-0.23%	1.3630	-1.12%	1.3630	-1.12%	7.1244	5.58%	11.5093	11.07%
2007 Mar	1.0515	-0.73%	1.3665	-1.21%	1.3665	-1.21%	7.1581	5.85%	11.5898	11.39%
2007 Apr	1.0605	0.21%	1.3780	-0.25%	1.3780	-0.25%	7.2305	6.34%	11.7442	12.07%
2007 May	1.0643	-0.17%	1.3809	-0.45%	1.3809	-0.45%	7.2443	6.44%	11.8645	12.62%
2007 Jun	1.0623	0.35%	1.3682	-0.52%	1.3682	-0.52%	7.2775	6.33%	11.9493	12.53%
2007 Jul	1.0655	0.84%	1.3718	-0.04%	1.3718	-0.04%	7.3078	6.13%	12.0475	12.32%
2007 Aug	1.0681	0.98%	1.3763	0.28%	1.3763	0.28%	7.3842	6.76%	12.2844	13.44%
2007 Sep	1.0659	1.40%	1.3757	0.83%	1.3757	0.83%	7.4025	6.61%	12.4816	14.12%
2007 Oct	1.0694	1.18%	1.3794	0.66%	1.3794	0.66%	7.4161	6.05%	12.7032	14.71%
2007 Nov	1.0672	0.76%	1.3718	0.07%	1.3718	0.07%	7.4410	5.88%	12.9155	15.37%
2007 Dec	1.0623	0.68%	1.3734	0.50%	1.3734	0.50%	7.4711	5.66%	13.0503	15.00%
2008 Jan	1.0634	0.63%	1.3777	0.44%	1.3777	0.44%	7.5048	5.58%	13.1794	15.24%
2008 Feb	1.0643	1.18%	1.3804	1.28%	1.3804	1.28%	7.5895	6.53%	13.4407	16.78%
2008 Mar	1.0729	2.04%	1.3887	1.62%	1.3887	1.62%	7.6553	6.95%	13.6124	17.45%
2008 Apr	1.0739	1.26%	1.3914	0.97%	1.3914	0.97%	7.6982	6.47%	13.7058	16.70%
2008 May	1.0763	1.13%	1.3934	0.91%	1.3934	0.91%	7.7103	6.43%	13.7749	16.10%
2008 Jun	1.0859	2.22%	1.4046	2.66%	1.4046	2.66%	7.7278	6.19%	13.8664	16.04%
2008 Jul	1.1000	3.24%	1.4211	3.59%	1.4211	3.59%	7.7742	6.38%	13.9360	15.68%
2008 Aug	1.0935	2.38%	1.4074	2.26%	1.4074	2.26%	7.7892	5.49%	14.0226	14.15%
2008 Sep	1.1429	7.22%	1.4620	6.27%	1.4620	6.27%	7.8591	6.17%	14.1755	13.57%
2008 Oct	1.1584	8.32%	1.4738	6.84%	1.4738	6.84%	7.9672	7.43%	14.1756	11.59%
2008 Nov	1.2067	13.07%	1.5146	10.41%	1.5146	10.41%	8.0179	7.75%	14.1371	9.46%
2008 Dec	1.2861	21.07%	1.6017	16.62%	1.6017	16.62%	8.1941	9.68%	14.4395	10.64%
2009 Jan	1.2662	19.07%	1.5828	14.89%	1.5828	14.89%	8.2753	10.27%	14.6713	11.32%
2009 Feb	1.2413	16.63%	1.5672	13.53%	1.5672	13.53%	8.3045	9.42%	14.6931	9.32%
2009 Mar	1.2508	16.58%	1.5789	13.70%	1.5789	13.70%	8.3704	9.34%	14.6765	7.82%
2009 Apr	1.2728	18.52%	1.6116	15.83%	1.6116	15.83%	8.3737	8.78%	14.6602	6.96%
2009 May	1.2768	18.63%	1.6175	16.08%	1.6175	16.08%	8.4314	9.35%	14.7950	7.41%
2009 Jun	1.3024	19.94%	1.6588	18.10%	1.6588	18.10%	8.4409	9.23%	14.7767	6.56%
2009 Jul	1.3004	18.22%	1.6625	16.99%	1.6625	16.99%	8.4458	8.64%	14.6879	5.40%
2009 Aug	1.2948	18.41%	1.6600	17.95%	1.6600	17.95%	8.4454	8.42%	14.6118	4.20%
2009 Sep 2009 Oct	1.2962 1.2990	13.41%	1.6649	13.88%	1.6649	13.88%	8.4446 8.4715	7.45%	14.5257	2.47%
2009 Oct 2009 Nov	1.3004	12.14% 7.76%	1.6777 1.6830	13.83% 11.12%	1.6777 1.6830	13.83% 11.12%	8.5016	6.33% 6.03%	14.4661 14.4128	2.05% 1.95%
2009 Dec	1.3096	1.83%	1.6928	5.69%	1.6928	5.69%	8.4964	3.69%	14.3717	-0.47%
2010 Jan	1.2988	2.57%	1.6747	5.81%	1.6747	5.81%	8.4585	2.21%	14.3020	-2.52%
2010 Feb	1.3170	6.10%	1.6998	8.46%	1.6998	8.46%	8.5082	2.45%	14.2618	-2.94%
2010 Teb 2010 Mar	1.3252	5.95%	1.7119	8.42%	1.7119	8.42%	8.5052	1.61%	14.1201	-3.79%
2010 Apr	1.3287	4.39%	1.6990	5.42%	1.6990	5.42%	8.5358	1.94%	13.9651	-4.74%
2010 May	1.3367	4.69%	1.7101	5.72%	1.7101	5.72%	8.5907	1.89%	13.9113	-5.97%
2010 Jun	1.3511	3.74%	1.7316	4.39%	1.7316	4.39%	8.6097	2.00%	13.8759	-6.10%
2010 Jul	1.3449	3.42%	1.7240	3.70%	1.7240	3.70%	8.6194	2.06%	13.9060	-5.32%
2010 Aug	1.3667	5.55%	1.7487	5.34%	1.7487	5.34%	8.6697	2.66%	13.9738	-4.37%
2010 Sep	1.3789	6.38%	1.7662	6.08%	1.7662	6.08%	8.7007	3.03%	13.9714	-3.82%
2010 Oct	1.3897	6.98%	1.7804	6.12%	1.7804	6.12%	8.7498	3.29%	13.9724	-3.41%
2010 Nov	1.4255	9.62%	1.8284	8.64%	1.8284	8.64%	8.7705	3.16%	13.9829	-2.98%
2010 Dec	1.4353	9.60%	1.8367	8.50%	1.8367	8.50%	8.8022	3.60%	13.9697	-2.80%

MONEY SUPPLY DETAIL - M1, M2 and M3, page 4 of 6

	[1]		[2]		[3]			[4]		[5]	
USED BY:	M1 - SHADOWSTATS		M1 - DORMANT		M1 - FRB			M2 - SHADO	OWSTATS	M3 - SHADOWSTATS	
ShadowStats	Basic	M1	Traditional M1		FRB Redefined M1,			Tradition	nal M2	FRB M3 Dropped in	
FRB	Currence	y and	Until 2021 FRB		Including Savings			M2 - FRB		2006, ShadowStats	
Dormant	Demand D	Deposits	Re-Definition*		Effective May 2020			Traditional M2		Estimate Thereafter	
Month	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %		\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %
2011 Jan	1.4481	11.50%	1.8535	10.68%	1.8463	10.25%		8.8232	4.31%	13.9451	-2.50%
2011 Feb	1.4709	11.69%	1.8726	10.17%	1.8701	10.02%		8.8870	4.45%	13.9443	-2.23%
2011 Mar	1.4949	12.81%	1.8913	10.48%	1.8965	10.78%		8.9434	5.15%	14.0028	-0.83%
2011 Apr	1.4985	12.78%	1.9008	11.88%	1.8970	11.65%		9.0049	5.50%	14.0871	0.87%
2011 May	1.5398	15.19%	1.9380	13.33%	1.9416	13.54%		9.0755	5.64%	14.2103	2.15%
2011 Jun	1.5583	15.34%	1.9560	12.96%	1.9634	13.39%		9.1513	6.29%	14.2083	2.40%
2011 Jul	1.5942	18.54%	2.0016	16.10%	1.9960	15.78%		9.3170	8.09%	14.2588	2.54%
2011 Aug	1.7037	24.66%	2.1134	20.86%	2.1154	20.97%		9.5086	9.68%	14.2730	2.14%
2011 Sep	1.7091	23.95%	2.1277	20.47%	2.1200	20.03%		9.5297	9.53%	14.2919	2.29%
2011 Oct	1.7179	23.62%	2.1395	20.17%	2.1285	19.55%		9.5635	9.30%	14.2955	2.31%
2011 Nov	1.7622	23.62%	2.1668	18.51%	2.1820	19.34%		9.6142	9.62%	14.3566	2.67%
2011 Dec	1.7535	22.17%	2.1642	17.83%	2.1657	17.91%		9.6619	9.77%	14.4172	3.20%
2012 Jan	1.7855	23.30%	2.2019	18.80%	2.1976	19.03%		9.7356	10.34%	14.4879	3.89%
2012 Feb	1.7933	21.92%	2.2099	18.01%	2.2098	18.16%		9.7935	10.20%	14.5124	4.07%
2012 Mar	1.8140	21.35%	2.2288	17.84%	2.2324	17.71%		9.8412	10.04%	14.5327	3.78%
2012 Apr	1.8237	21.70%	2.2481	18.27%	2.2442	18.30%		9.8940	9.87%	14.5309	3.15%
2012 May	1.8374	19.33%	2.2566	16.44%	2.2603	16.41%		9.9387	9.51%	14.5566	2.44%
2012 Jun	1.8603	19.38%	2.2770	16.41%	2.2817	16.21%		10.0023	9.30%	14.6041	2.79%
2012 Jul	1.8888	18.48%	2.3181	15.81%	2.3136	15.91%		10.0595	7.97%	14.6365	2.65%
2012 Aug	1.9211	12.76%	2.3488	11.14%	2.3509	11.13%		10.1194	6.42%	14.7219	3.14%
2012 Sep	1.9505	14.12%	2.3900	12.33%	2.3824	12.38%		10.1974	7.01%	14.7859	3.46%
2012 Oct	1.9785	15.17%	2.4220	13.20%	2.4152	13.47%		10.2608	7.29%	14.8196	3.67%
2012 Nov	1.9989	13.43%	2.4235	11.85%	2.4359	11.64%		10.3242	7.38%	14.8811	3.65%
2012 Dec	2.0160	14.97%	2.4612	13.72%	2.4594	13.56%		10.4558	8.22%	15.0756	4.57%
2013 Jan	2.0222	13.26%	2.4734	12.33%	2.4716	12.47%		10.4811	7.66%	15.1605	4.64%
2013 Feb	2.0271	13.04%	2.4721	11.86%	2.4740	11.96%		10.4930	7.14%	15.1817	4.61%
2013 Mar	2.0351	12.19%	2.4802	11.28%	2.4821	11.19%		10.5593	7.30%	15.1967	4.57%
2013 Apr	2.0597	12.94%	2.5151	11.88%	2.5132	11.99%		10.5937	7.07%	15.1696	4.40%
2013 May	2.0779	13.09%	2.5302	12.12%	2.5319	12.02%		10.6335	6.99%	15.1769	4.26%
2013 Jun	2.0796	11.79%	2.5313	11.17%	2.5326	11.00%		10.6860	6.84%	15.2403	4.36%
2013 Jul	2.0826	10.26%	2.5456	9.81%	2.5418	9.86%		10.7324	6.69%	15.2681	4.32%
2013 Aug	2.0942	9.01%	2.5522	8.66%	2.5537	8.63%		10.7869	6.60%	15.3047	3.96%
2013 Sep	2.1151	8.44%	2.5845	8.14%	2.5811	8.34%		10.8386	6.29%	15.3891	4.08%
2013 Oct	2.1522	8.78%	2.6226	8.28%	2.6200	8.48%		10.9521	6.74%	15.4639	4.35%
2013 Nov	2.1616	8.14%	2.6250	8.31%	2.6305	7.99%		10.9574	6.13%	15.5079	4.21%
2013 Dec	2.1933	8.79%	2.6645	8.26%	2.6629	8.27%		11.0236	5.43%	15.5906	3.42%
2014 Jan	2.2236	9.96%	2.6963	9.01%	2.6966	9.10%		11.0799	5.71%	15.6545	3.26%
2014 Feb	2.2538	11.18%	2.7258	10.26%	2.7284	10.28%		11.1726	6.48%	15.7330	3.63%
2014 Mar	2.2802	12.04%	2.7547	11.07%	2.7551	11.00%		11.2108	6.17%	15.7752	3.81%
2014 Apr	2.2999	11.66%	2.7784	10.47%	2.7777	10.52%		11.2631	6.32%	15.8041	4.18%
2014 May	2.3171	11.51%	2.7947	10.45%	2.7943	10.36%		11.3296	6.55%	15.8764	4.61%
2014 Jun	2.3466	12.84%	2.8295	11.78%	2.8295	11.72%		11.3804	6.50%	15.8994	4.32%
2014 Jul	2.3563	13.14%	2.8420	11.64%	2.8400	11.73%		11.4374	6.57%	15.9557	4.50%
2014 Aug	2.3215	10.85%	2.8035	9.85%	2.8036	9.79%		11.4665	6.30%	15.9667	4.33%
2014 Sep	2.3840	12.71%	2.8624	10.75%	2.8614	10.86%		11.5002	6.10%	16.0227	4.12%
2014 Oct	2.3878	10.95%	2.8682	9.36%	2.8683	9.48%		11.5621	5.57%	16.1121	4.19%
2014 Nov	2.4056	11.29%	2.8860	9.94%	2.8863	9.72%		11.5982	5.85%	16.2349	4.69%
2014 Dec	2.4522	11.80%	2.9403	10.35%	2.9394	10.38%		11.6775	5.93%	16.3800	5.06%

MONEY SUPPLY DETAIL - M1, M2 and M3, page 5 of 6

USED BY:	[1]		[2]		[3]			[4]		[5]	
ShadowStats	M1 - SHADOWSTATS		M1 - DORMANT		M1 - FRB		r	M2 - SHADO	DWSTATS	M3 - SHADOWSTATS	
FRB	Basic M1		Traditional M1		FRB Redefined M1,			Tradition	nal M2	FRB M3 Dropped in	
Dormant	Currenc	y and	Until 2021 FRB		Including Savings			M2 - FRB		2006, ShadowStats	
	Demand I	Deposits	Re-Definition*		Effective May 2020			Traditional M2		Estimate Thereafter	
Month	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %		\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %
2015 Jan	2.4529	10.31%	2.9405	9.06%	2.9410	9.06%		11.7474	6.02%	16.4945	5.37%
2015 Feb	2.5095	11.35%	3.0063	10.29%	3.0093	10.30%		11.8752	6.29%	16.6215	5.65%
2015 Mar	2.5020	9.73%	2.9996	8.89%	3.0022	8.97%		11.8918	6.07%	16.6591	5.60%
2015 Apr	2.4998	8.69%	3.0009	8.01%	3.0014	8.05%		11.9311	5.93%	16.6376	5.27%
2015 May	2.4828	7.15%	2.9864	6.86%	2.9837	6.78%		11.9614	5.58%	16.6364	4.79%
2015 Jun	2.5140	7.13%	3.0204	6.75%	3.0205	6.75%		12.0065	5.50%	16.6975	5.02%
2015 Jul	2.5295	7.35%	3.0405	6.98%	3.0380	6.97%		12.0559	5.41%	16.7853	5.20%
2015 Aug	2.5231	8.68%	3.0295	8.06%	3.0284	8.02%		12.1046	5.56%	16.8755	5.69%
2015 Sep	2.5320	6.21%	3.0450	6.38%	3.0430	6.35%		12.1586	5.73%	16.8781	5.34%
2015 Oct	2.5061	4.95%	3.0177	5.21%	3.0170	5.18%		12.1965	5.49%	16.9671	5.31%
2015 Nov	2.5699	6.83%	3.0814	6.77%	3.0812	6.75%		12.2809	5.89%	17.0510	5.03%
2015 Dec	2.5791	5.17%	3.0938	5.22%	3.0963	5.34%		12.3443	5.71%	17.0984	4.39%
2016 Jan	2.5867	5.45%	3.0978	5.35%	3.0999	5.40%		12.4759	6.20%	17.1548	4.00%
2016 Feb	2.6142	4.17%	3.1289	4.08%	3.1334	4.12%		12.5569	5.74%	17.2320	3.67%
2016 Mar	2.6386	5.46%	3.1523	5.09%	3.1572	5.16%		12.6211	6.13%	17.3080	3.90%
2016 Apr	2.6803	7.22%	3.2008	6.66%	3.1992	6.59%		12.7015	6.46%	17.3069	4.02%
2016 May	2.7144	9.33%	3.2390	8.46%	3.2373	8.50%		12.7683	6.75%	17.3533	4.31%
2016 Jun	2.7143	7.97%	3.2471	7.51%	3.2441	7.40%		12.8354	6.90%	17.4491	4.50%
2016 Jul	2.7116	7.20%	3.2487	6.85%	3.2425	6.73%		12.8940	6.95%	17.4871	4.18%
2016 Aug	2.7756	10.01%	3.3176	9.51%	3.3157	9.49%		12.9735	7.18%	17.5778	4.16%
2016 Sep	2.7792	9.76%	3.3268	9.25%	3.3226	9.19%		13.0328	7.19%	17.5516	3.99%
2016 Oct	2.7841	11.09%	3.3341	10.48%	3.3303	10.38%		13.1056	7.45%	17.5459	3.41%
2016 Nov	2.8048	9.14%	3.3528	8.81%	3.3547	8.88%		13.1802	7.32%	17.6335	3.42%
2016 Dec	2.7963	8.42%	3.3398	7.95%	3.3454	8.05%		13.2203	7.10%	17.7099	3.58%
2017 Jan	2.8407	9.82%	3.3883	9.38%	3.3982	9.62%		13.2953	6.57%	17.7476	3.46%
2017 Feb 2017 Mar	2.8508 2.8906	9.05% 9.55%	3.4027 3.4481	8.75% 9.38%	3.4113 3.4562	8.87% 9.47%		13.3659 13.4352	6.44% 6.45%	17.7862 17.8421	3.22% 3.09%
2017 Mai 2017 Apr	2.8874	7.73%	3.4556	7.96%	3.4501	7.84%		13.4932	6.23%	17.8421	3.46%
2017 Apr 2017 May	2.9367	8.19%	3.5187	8.64%	3.5128	8.51%		13.5440	6.08%	17.9878	3.66%
2017 Jun	2.9482	8.62%	3.5276	8.64%	3.5209	8.53%		13.5713	5.73%	18.0252	3.30%
2017 Jul	2.9678	9.45%	3.5513	9.31%	3.5418	9.23%		13.6281	5.69%	18.0755	3.36%
2017 Aug	2.9999	8.08%	3.5853	8.07%	3.5803	7.98%		13.6771	5.42%	18.2227	3.67%
2017 Sep	2.9825	7.32%	3.5744	7.44%	3.5634	7.25%		13.7187	5.26%	18.3010	4.27%
2017 Oct	3.0154	8.31%	3.6039	8.09%	3.6012	8.13%		13.7717	5.08%	18.3815	4.76%
2017 Nov	3.0354	8.22%	3.6279	8.21%	3.6319	8.26%		13.8061	4.75%	18.4406	4.58%
2017 Dec	3.0230	8.11%	3.6070	8.00%	3.6189	8.18%		13.8587	4.83%	18.5157	4.55%
2018 Jan	3.0652	7.90%	3.6490	7.69%	3.6684	7.95%		13.8761	4.37%	18.5213	4.36%
2018 Feb	3.0313	6.33%	3.6192	6.36%	3.6339	6.53%		13.9187	4.14%	18.5399	4.24%
2018 Mar	3.0690	6.17%	3.6614	6.19%	3.6725	6.26%		13.9751	4.02%	18.5984	4.24%
2018 Apr	3.0449	5.45%	3.6619	5.97%	3.6536	5.90%		14.0055	3.80%	18.6201	3.99%
2018 May	3.0347	3.34%	3.6577	3.95%	3.6462	3.80%		14.0706	3.89%	18.6740	3.81%
2018 Jun	3.0304	2.79%	3.6597	3.74%	3.6447	3.52%		14.1303	4.12%	18.7791	4.18%
2018 Jul	3.0517	2.83%	3.6800	3.62%	3.6692	3.60%		14.1594	3.90%	18.8215	4.13%
2018 Aug	3.0602	2.01%	3.6914	2.96%	3.6827	2.86%		14.2018	3.84%	18.8684	3.54%
2018 Sep	3.0693	2.91%	3.7085	3.75%	3.6923	3.62%		14.2324	3.74%	18.9340	3.46%
2018 Oct	3.0855	2.32%	3.7232	3.31%	3.7215	3.34%		14.2397	3.40%	18.9635	3.17%
2018 Nov	3.0789	1.43%	3.7018	2.04%	3.7084	2.11%		14.2583	3.28%	18.9882	2.97%
2018 Dec	3.1402	3.88%	3.7505	3.98%	3.7712	4.21%		14.3772	3.74%	19.1477	3.41%

MONEY SUPPLY DETAIL - M1, M2 and M3, page 6 of 6

USED BY:	[1]		[2]		[3	[3]		[4]		[5]	
ShadowStats	M1 - SHADOWSTATS		M1 - DORMANT		M1 -	M1 - FRB		M2 - SHADOWSTATS		M3 - SHADOWSTATS	
FRB	Basic	M1	Traditio	Traditional M1		FRB Redefined M1,		Traditional M2		FRB M3 Dropped in	
Dormant	Currency and		Until 20	Until 2021 FRB		Savings		M2 - FRB		2006, Shad	lowStats
	Demand Deposits		Re-Definition*		Effective May 2020			Traditional M2		Estimate TI	nereafter
Month	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %		\$ Trillions	Yr/Yr %	\$ Trillions	Yr/Yr %
2019 Jan	3.1397	2.43%	3.7435	2.59%	3.7729	2.85%		14.4468	4.11%	19.2555	3.96%
2019 Feb	3.1535	4.03%	3.7628	3.97%	3.7834	4.11%		14.4898	4.10%	19.3345	4.29%
2019 Mar	3.1130	1.43%	3.7333	1.96%	3.7464	2.01%		14.5367	4.02%	19.4374	4.51%
2019 Apr	3.1206	2.49%	3.7840	3.33%	3.7706	3.20%		14.5727	4.05%	19.4701	4.57%
2019 May	3.1237	2.93%	3.7951	3.76%	3.7754	3.54%		14.6725	4.28%	19.5604	4.75%
2019 Jun	3.1605	4.29%	3.8352	4.80%	3.8134	4.63%		14.7912	4.68%	19.7234	5.03%
2019 Jul	3.1835	4.32%	3.8601	4.89%	3.8448	4.79%		14.8621	4.96%	19.8525	5.48%
2019 Aug	3.1845	4.06%	3.8560	4.46%	3.8440	4.38%		14.9388	5.19%	20.0159	6.08%
2019 Sep	3.2209	4.94%	3.9058	5.32%	3.8877	5.29%		15.0301	5.60%	20.1792	6.58%
2019 Oct	3.2538	5.45%	3.9251	5.42%	3.9261	5.50%		15.1567	6.44%	20.3997	7.57%
2019 Nov	3.2894	6.84%	3.9505	6.72%	3.9556	6.67%		15.2544	6.99%	20.5814	8.39%
2019 Dec	3.3368	6.26%	3.9780	6.07%	4.0112	6.36%		15.3291	6.62%	20.7731	8.49%
2020 Jan	3.3439	6.50%	3.9773	6.25%	4.0189	6.52%		15.4100	6.67%	20.9057	8.57%
2020 Feb	3.3519	6.29%	4.0038	6.40%	4.0276	6.45%		15.4734	6.79%	20.9859	8.54%
2020 Mar	3.5880	15.26%	4.2570	14.03%	4.2802	14.25%		16.0143	10.16%	21.7409	11.85%
2020 Apr	3.7876	21.37%	4.7991	26.83%	4.7733	26.59%		17.0429	16.95%	23.3616	19.99%
2020 May	3.9283	25.76%	5.0362	32.70%	16.2759	331.10%		17.8930	21.95%	24.4781	25.14%
2020 Jun	4.0337	27.63%	5.2174	36.04%	16.6018	335.35%		18.1798	22.91%	24.8622	26.05%
2020 Jul	4.1021	28.86%	5.3298	38.07%	16.7950	336.82%		18.3215	23.28%	24.9268	25.56%
2020 Aug	4.1735	31.06%	5.3863	39.69%	16.9111	339.93%		18.3848	23.07%	24.8710	24.26%
2020 Sep	4.3147	33.96%	5.4966	40.73%	17.1840	342.01%		18.6096	23.82%	24.9838	23.81%
2020 Oct	4.3638	34.11%	5.5490	41.37%	17.3763	342.58%		18.7593	23.77%	25.0219	22.66%
2020 Nov	4.7465	44.30%	5.9863	51.53%	17.6201	345.45%		18.9744	24.39%	25.1702	22.30%
2020 Dec	5.2876	58.46%	6.5347	64.27%	17.8405	344.77%		19.1458	24.90%	25.2966	21.78%
2021 Jan	5.4511	63.02%	6.7509	69.74%	18.1206	350.88%		19.4001	25.89%	25.5050	22.00%
2021 Feb	5.6846	69.59%	n.a	n.a.	18.4120	357.15%		19.6698	27.12%	25.7354	22.63%

^{*} Accompanying the second live month of reporting (February 2021) for the Redefined M1, on March 23, 2021, was an FRB 10-year benchmark revision to seasonal factors for all the series, back to January 2011. Those new seasonal adjustments were in the context of the M1 redefinitions. Accordingly, all the numbers here reflect the benchmark revisions, except the "Dormant" M1, which was not affected. The revisions also were incorporated into the ShadowStats Ongoing M3, along with some other benchmarking of Non-M2 M3 back to 2006.

Sources: Federal Reserve Board (FRB), St. Louis Federal Reserve, ShadowStats.com

The Federal Reserve will publish March 2021 Money Supply estimates on April 27, 2021. Monthly Money Supply data are released the fourth Tuesday of the following month, at 1 p.m. ET.

Section III: March 2021 Monetary Base: Reserves and Currency in Circulation Continue to Spike, Suggesting Mounting Systemic Risks

The Monetary Base is Reserves at Federal Reserve Banks plus Currency in Circulation

Given Year-Ago Pandemic Impact, March 2021 Monetary Base Growth Was Strongest Since the 2007-2008 Banking-Collapse Drove the Great Recession

Against Year-Ago Pandemic Impact, March 2021, Currency in Circulation Growth Hit a Record High, Surpassing Greenspan's Y2K Precautionary Cash Build Up

Deteriorating Weekly Numbers Suggest Renewed Banking-System Instabilities

Late-March and early-April 2021 continuing surges in the weekly Monetary Base, and component "Currency in Circulation" and "Reserve Balances with Federal Reserve Banks" may explain some of Fed Chairman Powell's policy tap-dancing at his March 17th FOMC Press Conference. The System increasingly appears to be on the brink of potential instability. The week-ended March 31st and the implied monthly averages of the March 2021 Monetary Base (see the Fed's H.4.1), viewed against a pre-Pandemic base of February 2020, show Currency growth and the level of Bank Reserves at all-time highs and spiking, suggestive of mounting Banking System instabilities not seen since the Great Recession, see *Graphs* 27 to 38, beginning on page 43. The Fed's formal release of headline monthly March 2021 Monetary Base, Reserve Balances at Federal Reserve Banks and Currency in Circulation follows on Tuesday, April 27th at 1:00 p.m. ET. The Alternate Measures shown here versus the Pandemic distorted March 2021 year-to-year change were outlined in *Section 1*.

Continuing Surges in March and Early-April 2021 Monetary Base and Subsidiary Bank Reserves at Federal Reserve Banks, and Currency in Circulation, Suggest a System On the Brink of Disorder. One of the Fed's currently stated goals is to spike inflation. Indeed, targeted at boosting headline inflation, annual growth in the not-benchmarked FOMC-controlled Monetary Base bounced higher to 52.4% in January 2021, from 52.0% in December 2020 versus 53.6% in November, still off an interim near-term low of 44.2% in July, having peaked earlier at 58.7% in May 2020, as part of the Fed's initial Pandemic monetary stimulus. Separately, unadjusted annual growth in January 2021 Currency in Circulation (part of the Monetary Base) increased to 16.5%, up from 15.3% in December, having held at 15.2% for two months before. January 2021 annual growth was just 1.0% shy of breaking the near-term peak growth of 17.5% in December 1999, which reflected Alan Greenspan's extraordinary Y2K precautionary cash build-up.

Levels of Activity Keep Spiking to Historic Highs, Yet, With Pandemic Disruptions Beyond Their First Anniversary, Growth Patterns Have to Be Assessed Against Pre-Pandemic Conditions, Not Just Year-Ago Levels. The week-ended March 31st, and the implied monthly average of the March 2021 Monetary Base (see the Fed's H.4.1, composed of Currency in Circulation plus Reserve Balances with Federal Reserve Banks for the latest weekly detail), hit all-time highs, against the base pre-Pandemic high base of January 2020.

Considered against Pre-Pandemic peak levels, Currency growth is at an all-time high, while the extreme current growth in the aggregate Monetary Base was last seen when the U.S. economy crashed along with the 2007/2008 Banking System collapse. Those patterns of expanding growth continued with the weekended April 7, 2021 detail just published on April 8th.

Graphs 27 to 38 plot the monthly levels of and various growth measures (see the discussion in *Section I*) for the Federal Reserve Monetary Base and its two components, Reserve Balances with Federal Reserve Banks and Currency in Circulation. Where the Monetary Base hit its Pre-Pandemic peak in January 2020, March 2021 levels have surged to extreme, unprecedented, historic highs, while 2021 growth has spiked to levels not seen since the emergency systemic liquefaction at the time of the 2007-2008 banking system collapse.

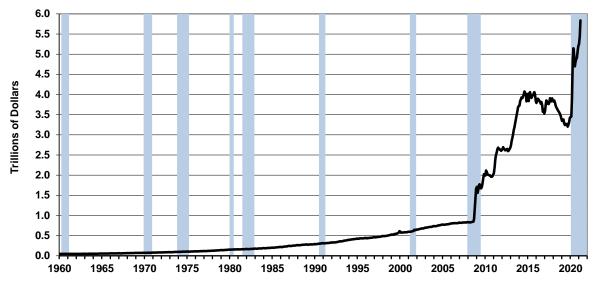
What is important to consider in looking at the extreme levels of annual growth in the 2007-2008 crisis, is that it was off comparatively low levels. Despite its efforts to the contrary, the Federal Reserve never has been able to restore the Banking System to its pre-2007 Collapse stability. Accordingly, the current surge in annual growth also is extreme, but measured beginning on top of a much higher starting base.

Accelerating deterioration in the current period, after the Fed's initial liquidity fix March 2021, suggests that the post-Pandemic Banking System instabilities are accelerating anew.

[Graphs 27 to 38 of the Monetary Base and its Component Measures begin on the next page.]

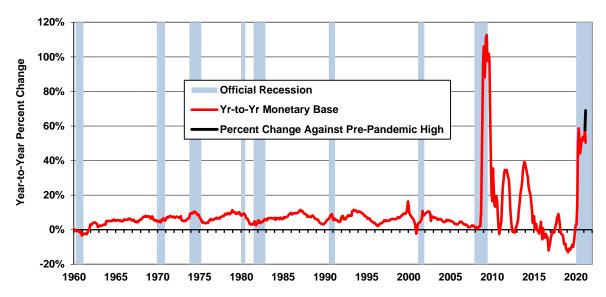
Graph 27: Monetary Base (1960 to March 2021 – All-Time High Level)





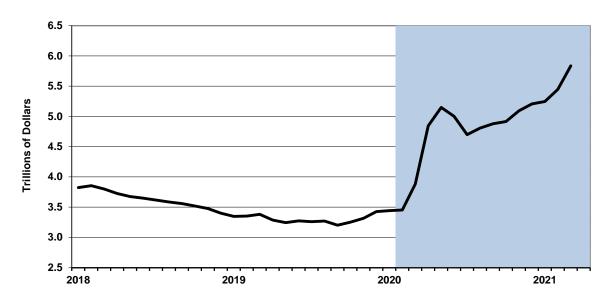
Graph 28: Monetary Base, Percent Changes Year-to-Year, and from Pre-Pandemic Levels (1960 to March 2021)

Monetary Base - Year-to-Year Percent Change 1960 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



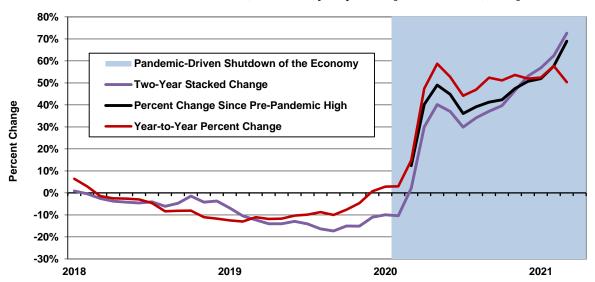
Graph 29: Monetary Base (2018 to March 2021 – All-Time High Level)

Monetary Base, Trillions of Dollars 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



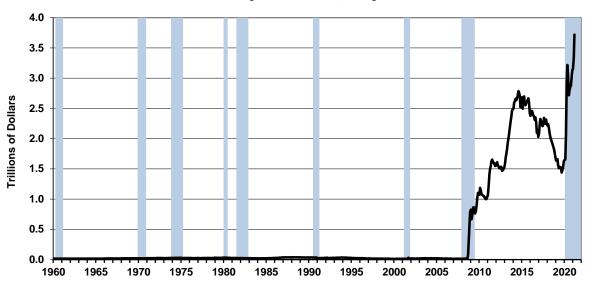
Graph 30: Monetary Base (2018 to March 2021) - Percentage Changes

Monetary Base - Percent Changes Year-to-Year, Two-Year Stacked and Against Pre-Pandemic Peak 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 31: Reserve Balances with Federal Reserve Banks (1960 to March 2021 – All-Time High Level)

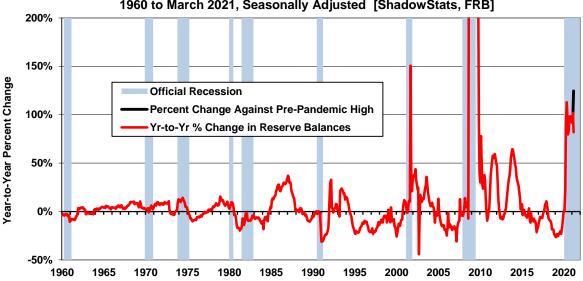
Reserve Balances with Federal Reserve Banks Trillions of Dollars, 1960 to Mar 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 32: Reserve Balances with Federal Reserve Banks, Percent Changes Yr/Yr and from Pre-Pandemic Levels

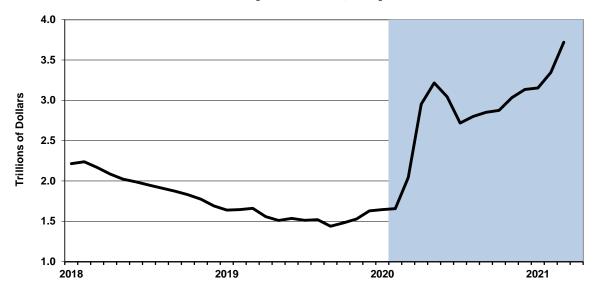
Reserve Balances with Federal Reserve Banks

Yr-to-Yr Percent Change, Peak Annual Growth in Jan 2009 was 5,259.7%, March 2021 was 124.5% above Its Pre-Pandemic Peak 1960 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 33: Reserve Balances with Federal Reserve Banks (2018 to March 2021 – All-Time High Level)

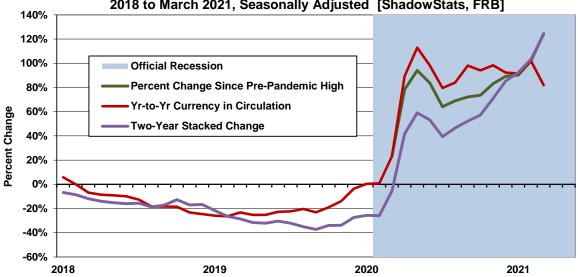
Reserve Balances with Federal Reserve Banks Trillions of Dollars, 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 34: Reserve Balances with Federal Reserve Banks (2018 to March 2021) - Percentage Changes

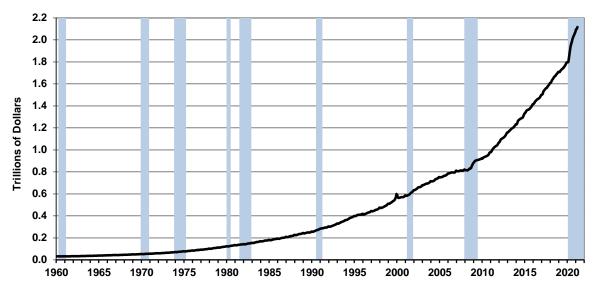
Reserve Balances with Federal Reserve Banks

Percent Changes to March 2021, Year-to-Year, Two-Year Stacked and Against Pre-Pandemic Peak 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



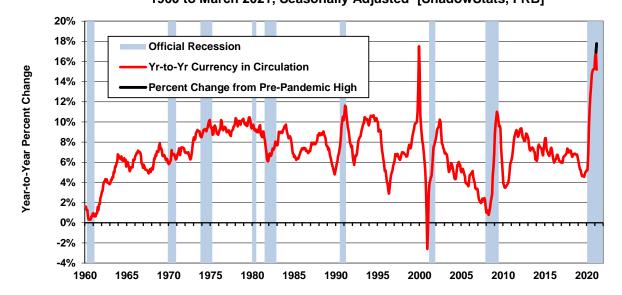
Graph 35: Currency in Circulation (1960 to March 2021, All-Time High Level)





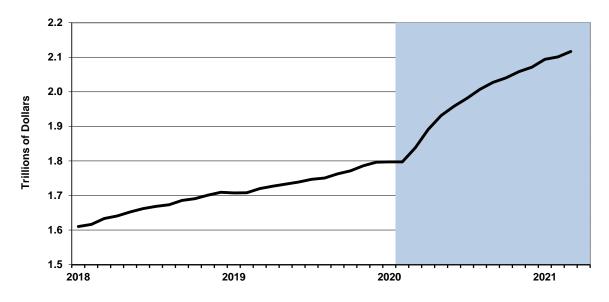
Graph 36: Currency in Circulation, Percent Changes Yr-to-Yr, and vs. Pre-Pandemic Peak (1960 to March 2021)

Currency in Circulation - Percent Change Year-to-Year and Against Pre-Recession Peak 1960 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 37: Currency in Circulation (2018 to March 2021, All-Time High Level)

Currency in Circulation, Trillions of Dollars 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]



Graph 38: Currency in Circulation, Percent Changes, (2018 to March 2021)

Currency in Circulation - Percent Changes Year-to-Year, Two-Year Stacked and vs. Pre-Pandemic Peak 2018 to March 2021, Seasonally Adjusted [ShadowStats, FRB]

