

PRESS RELEASE

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2021 Totals are in: \$4 Trillion Increase in Debt Fuels Largest Annual GDP Growth in 36 Years

Private Placement Securities and Margin Debt Continue to Warrant Concern

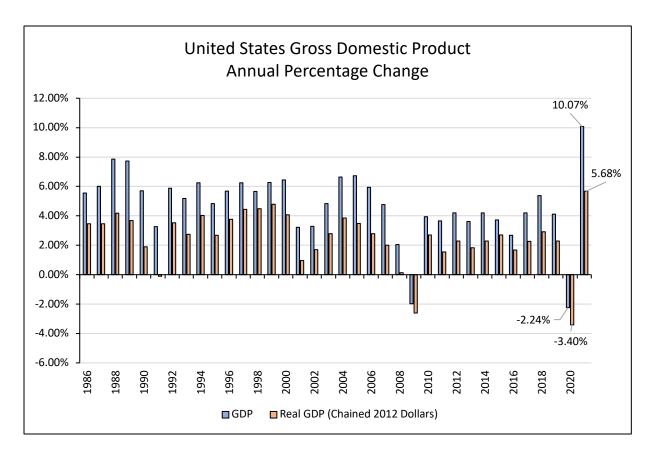
The Tychos Group is now highlighting three areas of increased focus and potential credit concern: Private Placement Securities, Margin Debt and Multifamily Residential Mortgages.

"While the U.S. economy saw a historic increase in both nominal and real GDP for 2021, continued growth in private sector debt in relation to GDP warrant careful monitoring", stated Dan McShane of the Tychos Analytics Group, a not-for-profit data firm focusing on trends in private sector debt and derivatives.

Additional details and a comprehensive report are available at www.tychosgroup.org.

Gross Domestic Product:

According to the Bureau of Economic Analysis, United States' GDP saw its largest annual percentage change in 36 years, following the 2.2 percent decline witnessed in 2020. Currently, GDP sits at \$23 trillion, up 10 percent from \$20.9 trillion in 2020 (See Chart). Real GDP, which removes inflation contributions from the equation, also observed its largest annual increase in 36 years.



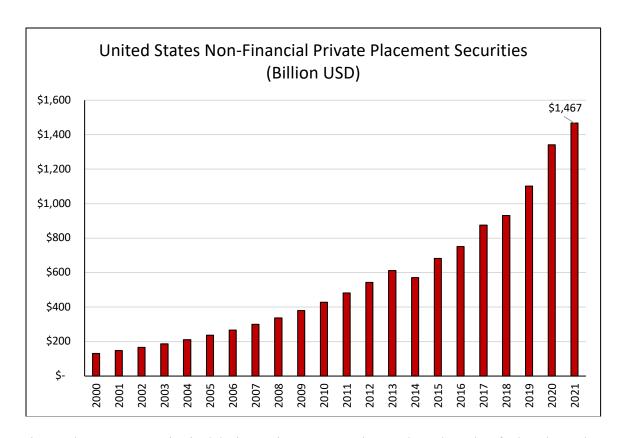
The key drivers of nominal growth in GDP are the expansion of U.S. debt and rising inflation. The \$4 trillion in U.S. debt growth compares to \$6.9 trillion in 2020, also an extraordinary year due to unprecedented government support programs. The better comparison is to the average \$2.4 trillion in annual total debt growth from 2015 to 2019. The global pandemic in 2020 brought domestic consumption and investment to a halt, which led to the 2.2 percent decline in GDP.

As we have seen before in the years prior to 2008, the late 1980s, and 1929, rapid debt growth in relation to GDP can lead to financial turmoil. Therefore, monitoring debt trends is a crucial component in predicting a financial crisis.

The most notable areas of concern are:

Non-Financial Private Placement Debt Securities:

According to Bloomberg, non-financial private placement debt securities have reached \$1.47 trillion on 12/31/2021, a five-year increase of \$716 billion (See Chart). Even more recent data suggests continued growth over \$1.48 trillion in January of 2022.

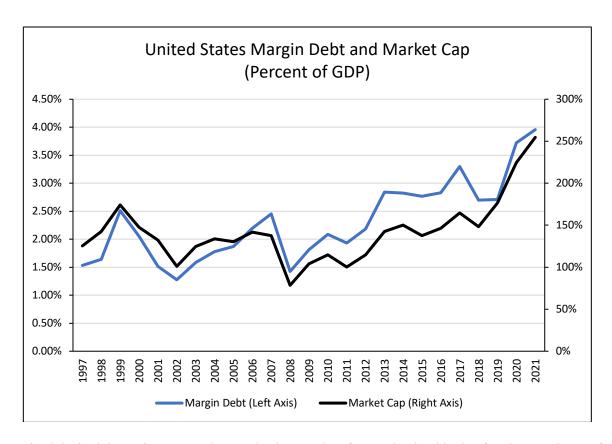


A private placement security is debt in a private transaction such as the sale of a bond to select investors rather than on the open market. The Federal Reserve's Financial Accounts of the United States excludes private placement securities from their debt by sector totals, however, we believe this data is an increasingly important component of the indebtedness of non-financial firms. Rapid expansion could signal more accommodating debt covenants and credit standards.

This is based on information as of 03/09/22. The next update from Bloomberg on this information will be 05/01/22.

Margin Debt:

According to FINRA's margin statistics, margin debt remains a concern having reached \$910 billion on 12/31/2021, 17 percent higher to GDP on an annualized basis than the level of \$778 billion on 12/31/2020 (See Chart). More recent data shows a slight decline in January and February of 2022, sitting at \$830 and \$835 billion, respectively. This level represents a post-World War II record high.

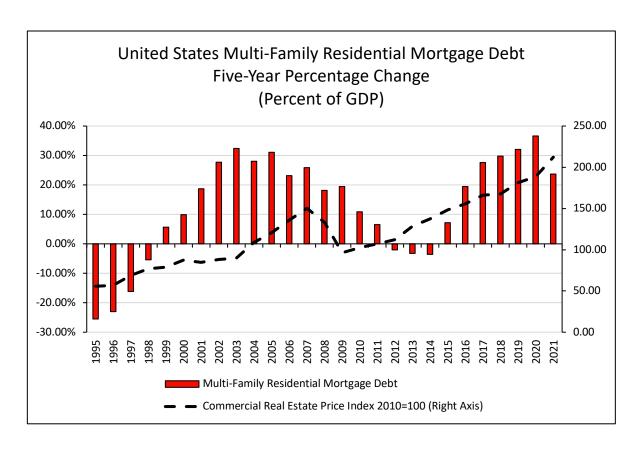


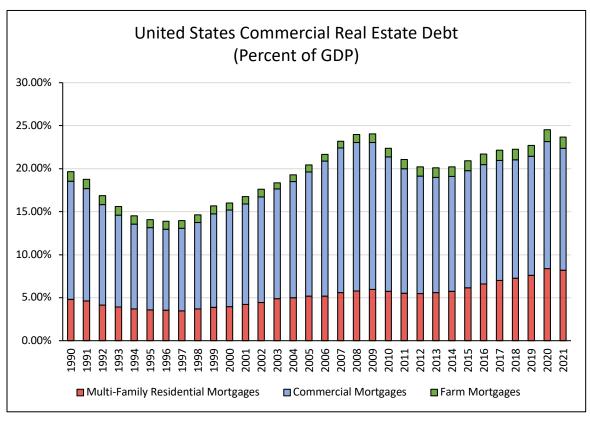
Margin debt is debt an investor takes on by borrowing from a broker/dealer for the purchase of securities. A rise in margin debt underscores the dependency of stock prices on debt and presents a concern regarding the potential of forced selling in a market decline.

This is based on information as of 03/16/22. The next update from FINRA on this information will be 06/01/22.

Commercial Real Estate:

Commercial Real Estate loan growth continues at acceptable levels. Within that, Multifamily Residential Mortgage growth continues at a high but steady level of roughly \$120 to \$130 billion per annum. According to the Federal Reserve's Financial Accounts of the United States, the debt level as a percentage of GDP reached 8.2 percent as of 12/31/2021, 24 percent higher on an annualized basis than the level 6.6 percent on 12/31/2016 (See Chart). Though still high, this rate of growth has decelerated slightly from prior years.





Multifamily Residential Mortgages are loans secured by housing units in structures with five or more units, excluding buildings composed of condominiums and cooperatives where the units are individually owned and may be financed with a one-to-four-family mortgage.

A rapid increase in loans to this sector could suggest an oversupply of units in this sector.

This is based on information as of 2021 Q4 that became publicly available on 03/10/2022. The next update from the Federal Reserve on this information will be 06/09/2022.

About Tychos

Tychos is a not-for-profit data analytics firm specializing in private sector credit and derivative information. Historically, a rapid buildup in credit in a given sector has led to credit related issues in that sector, and Tychos analyses are designed to monitor these types of trends. Tychos examines data for the largest seven economies in the world, namely the United States, China, Japan, Germany, France, the United Kingdom, and India, which collectively represent over 60 percent of global GDP.

Additional details are available at www.tychosgroup.org.