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PRESS RELEASE January 12, 2022 Contact Information Tychos Analytics Group Dan McShane Dan.McShane@tychosgroup.org

New Report: Equity Derivatives Soar to Unprecedented Levels

Private Placement Securities and Margin Debt Remain a Concern, While Multifamily Residential Mortgage Trends Deserve Increased Attention

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

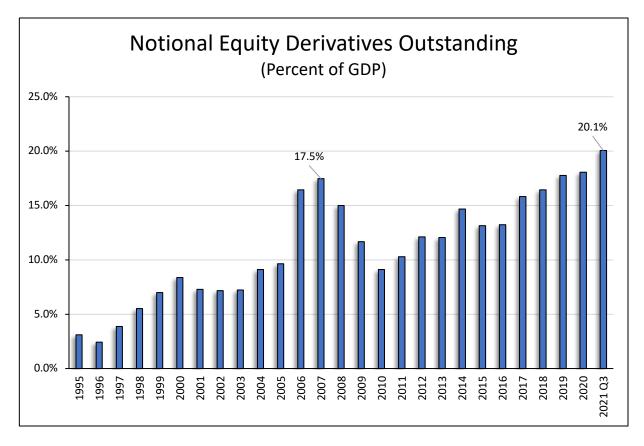
"While the U.S. economy has gained momentum entering the back end of the pandemic, increases in recent trends warrant careful monitoring", stated Dan McShane of the Tychos Analytics Group, a not-for-profit data firm focusing on trends in private sector debt and derivatives.

Additional details and a comprehensive report are available at <u>www.tychosgroup.org</u>.

The most notable areas of concern are:

Equity Derivatives:

As reported by the OCC in its most recent Quarterly Report on Bank Trading and Derivatives Activities, the notional amount outstanding of equity derivatives to GDP has reached an all-time high of 20.1 percent, well above the previous peak of 17.5 percent of GDP reached in 2007, and more than double the 9.1 percent of GDP in 2010 (See Chart).



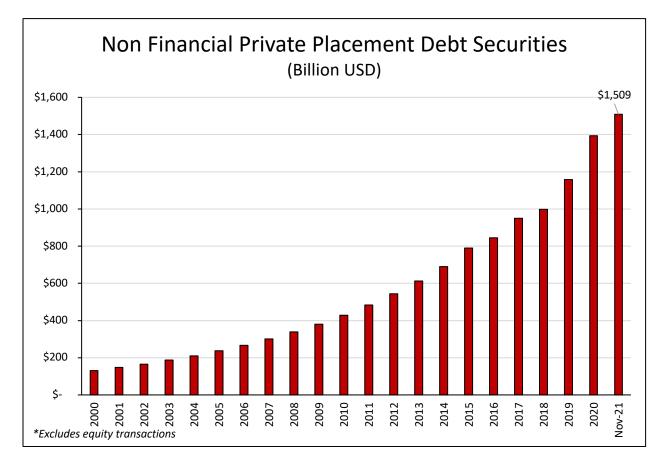
Equity derivative transactions are transactions in which a portion of the return (including interest, principal, or payment streams) is linked to the price of a particular equity security or to an index of such securities. Equity derivative transactions include equity and equity index swaps, equity index deposits, equity-linked loans and debt issues, and other bank permissible equity derivative products.

This high level of equity derivatives would suggest an element of caution relative to current equity market valuations.

Overall, reported derivative credit risk remains low. According to the OCC, Net Current Credit Exposure of Banks and Savings Institutions stands at \$453 billion as of 09/2021, down from the level of \$800 billion in the fourth quarter of 2008 and down from the recent peak of \$594 billion in the first quarter of 2020. However, this net position is dependent on operational accuracy and completeness of reporting, so we remain vigilant.

This is based on information as of 2021 Q3 that became publicly available on 12/20/2021. The next update from the OCC on this information will be 03/2022.

Private Placement Debt Securities:



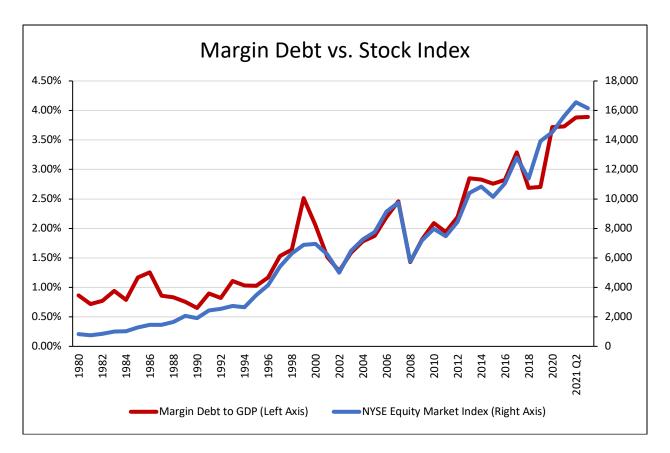
According to Bloomberg, non-financial private placement debt securities have reached \$1.49 trillion on 09/30/2021, a five-year increase of \$642 billion (See Chart). Even more recent data suggests continued growth over \$1.51 trillion in November of 2021.

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 12/21/21. The next update from Bloomberg on this information will be 02/01/22.

Margin Debt:

According to FINRA's margin statistics, margin debt remains a concern having reached \$903 billion on 09/30/2021, 26 percent higher to GDP on an annualized basis than the level of \$654 billion on 09/30/2020 (See Chart). Even more recent data suggests continued growth to over \$936 billion in October of 2021, followed by a slight decline to \$919 billion in November of 2021. This level represents a post-World War II record high.

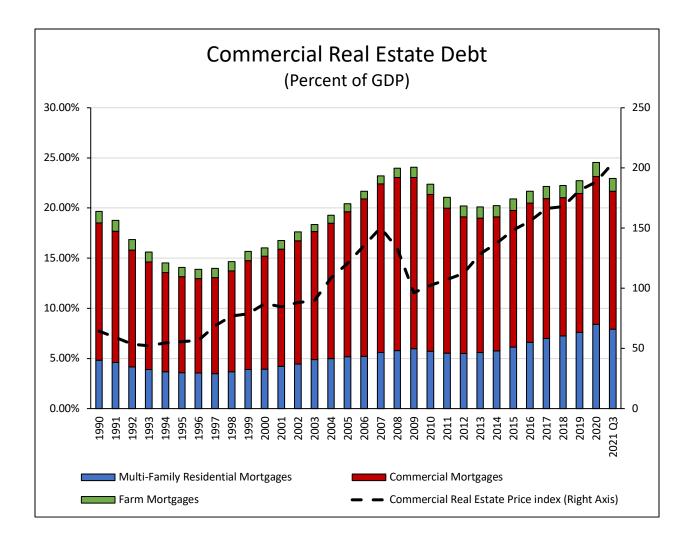


Margin debt is debt an investor takes on by borrowing from a broker/dealer for the purchase of securities. A rise in margin debt underscores the dependency of stock prices on debt and presents a concern regarding the potential of forced selling in a market decline.

This is based on information as of 12/21/21. The next update from FINRA on this information will be 02/01/22.

Multi-Family Residential Mortgages:

According to the Federal Reserve's Financial Accounts of the United States, Multifamily Residential Mortgages, a major component of Commercial Real Estate debt, has reached 7.9 percent of GDP as of 09/30/2021, 24 percent higher on an annualized basis than the level of 6.4 percent of GDP on 09/30/2016 (See Chart).



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 Q3 that became publicly available on 12/20/2021. The next update from the Federal Reserve on this information will be 03/10/2022.

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 <u>www.tychosgroup.org</u>.