Office of the Comptroller of the Currency

ON POINT

ECONOMIC AND POLICY INSIGHT FROM THE OCC

High Business Debt Does Not Represent a "Bubble"

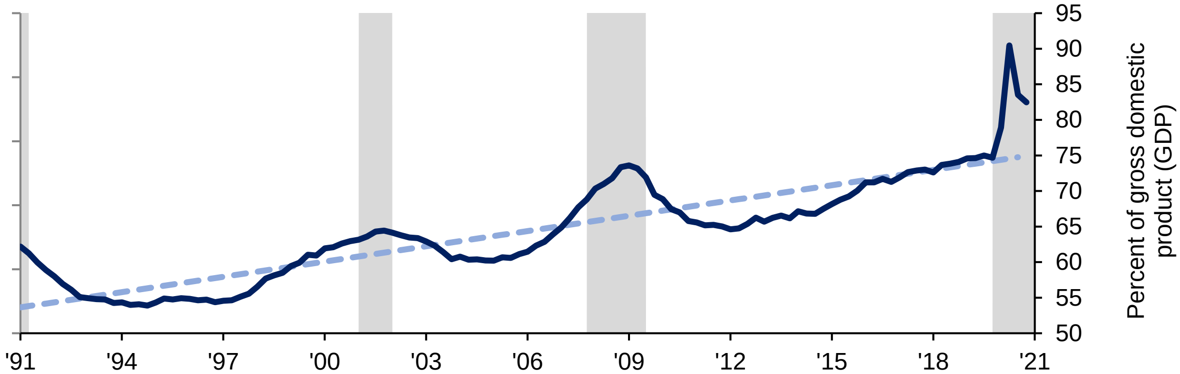
Nonfinancial business debt, already at record levels in the fourth quarter of 2019, surged still further in the first half of 2020. This occurred as government policies supported heavy borrowing by firms seeking to build cash reserves as they struggled to deal with fallout from the pandemic. In the spring of 2020, a number of analysts raised concerns that these policies had helped promote a "debt bubble" that could trigger "mushrooming" inflation and financial market distortions and, at the same time, would fail to bolster economic activity. The same government policies that facilitated the increase in debt, however, also eased stress in financial markets and supported a sharp rebound in real output in the second half of last year. And despite a slight pickup, inflation remains subdued.

By contrast, when analysts raise the specter of a debt bubble, they are typically referring to an upsurge in credit that is driven by a breakdown in lending standards that results in inflation and "paper" profits but does not contribute to production of real goods and services. This is followed by a rise in business insolvency and a rapid contraction in debt—"bursting the bubble"—often resulting in a protracted period of anemic economic growth. Although the current business debt load appears elevated relative to historical experience, mitigating factors suggest the United States is not in the midst of a debt bubble, let alone one that is likely to "burst."

Surge in Nonfinancial Business Debt

Nonfinancial business debt outstanding increased at a sharp 18 percent average annual rate in the first half of 2020 and remained at record levels through the fourth quarter. The increase in business borrowing coming on top of the steep drop in the economy in the second quarter of 2020 drove the U.S. nonfinancial business debt-to-GDP ratio to historical highs (figure 1). Although the ratio moderated somewhat over the second half of 2020 as GDP rebounded, it remains at near record levels. Even before the pandemic-related surge, the debt-to-GDP ratio had been on an uptrend for several decades, reaching an elevated 75 percent by the fourth quarter of 2019—well above the 69 percent level just before the 2007-2009 recession and financial crisis.

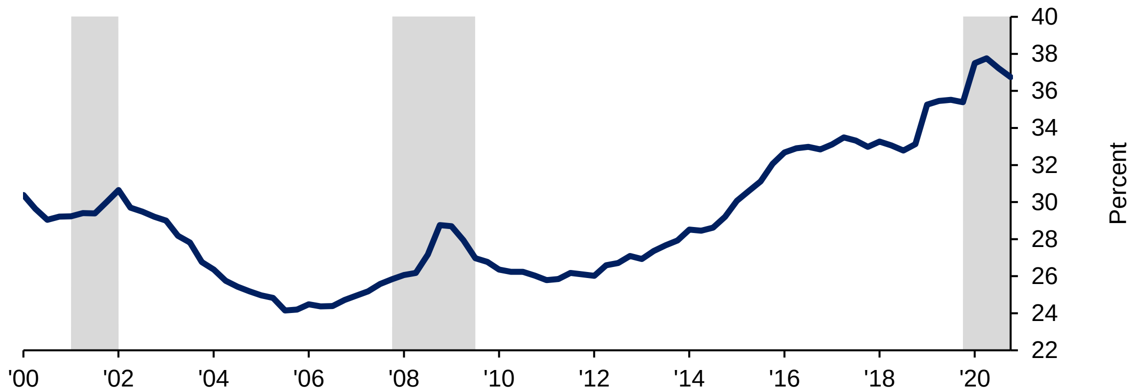
Figure 1: U.S. Nonfinancial Business Debt Share of GDP



Sources: Federal Reserve Board; Bureau of Economic Analysis; Haver Analytics

Although the debt-to-GDP ratio rose sharply in the 2005-2007 period leading into the 2007-2009 recession, nonfinancial firms in the aggregate were not overleveraged from a debt-to-assets perspective (figure 2).The short-term run-up in debt-to-asset levels at nonfinancial firms to 26 percent in late 2007 occurred on the cusp of a two-decade-long downtrend.[1] By contrast, since 2011 this debt-to-assets ratio climbed to 35 percent by the fourth quarter of 2019, well above the pre-2007-2009 recession level. And the ratio jumped still further in the second quarter of last year reaching an elevated 38 percent suggesting heightened insolvency risks.[2]

Figure 2: Elevated U.S. Nonfinancial Business Debt- to-Assets



Sources: Federal Reserve Board; OCC Economics; Haver Analytics

Leveraged loans and bonds were the fastest growing segments of nonfinancial business debt from 2010-2019, increasing at average annual rates of 14 percent and 7 percent respectively. Low interest rates and borrowing costs were an important driver of the increase in business debt from 2010 to 2019.[3] In addition to funding higher capital expenditures, firms used the debt to

[1] Ben S. Bernanke, Federal Reserve Chair, speaking before the Financial Crisis Inquiry Commission, Washington, D.C., September 2, 2010.

[2] Board of Governors of the Federal Reserve System, *Monetary Policy Report*, February 19, 2021.

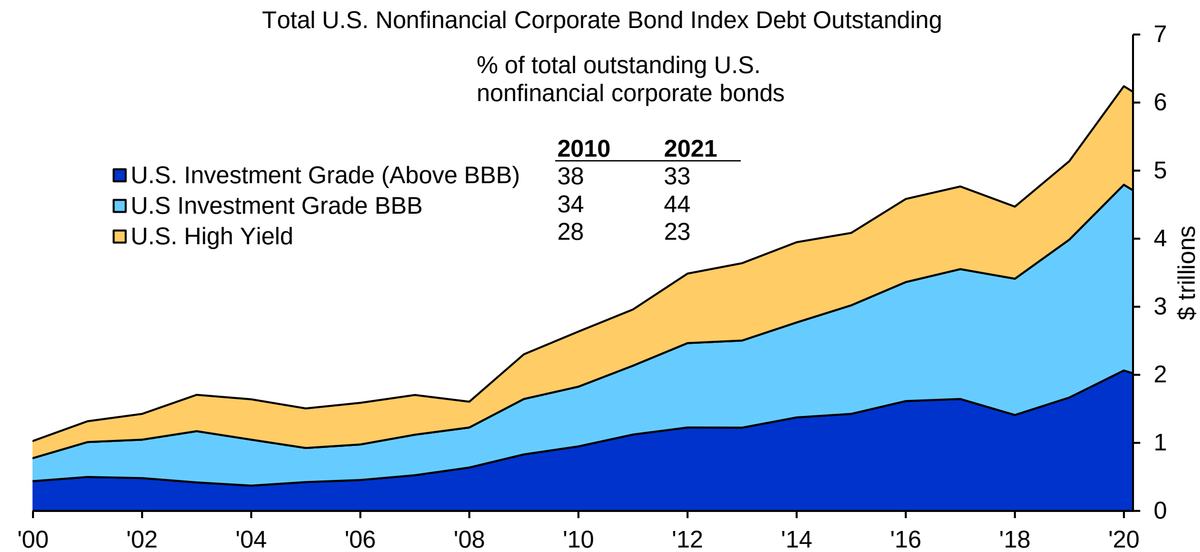
[3] Federal Reserve Board, "Financial Accounts of the United States – Z.1 release," fourth quarter 2020, and Federal Reserve Board, *Financial Stability Report*, November 2020, section II, "Borrowing by Businesses and Households."

finance mergers and acquisitions, fund share buybacks, and increase dividends as companies sought to boost share prices.[4] At the same time, investor demand for bonds remained strong as the low interest rate environment encouraged yield seeking. By contrast, the even stronger surge in nonfinancial business borrowing over the first half of 2020 occurred as companies loaded up equally on bond and bank debt to build cash reserves.

Corporate Debt Growth Fueled by Higher Credit Risk Borrowers

A major concern among market participants is that the increase in nonfinancial business debt (and in particular high credit risk debt) over the past decade could potentially intensify the severity of future recessions or market downturns. Moreover, when business debt reaches an excessive level, it can become a drag on economic growth even in the absence of specific shocks.[5] In addition to the increase in business debt generally, there was a steady rise in the volume of BBB-rated bonds outstanding (the lowest level of investment-grade debt), continuing a trend that began in 2006. Currently, over half of nonfinancial investment-grade debt is rated BBB, near an all-time high (figure 3). The share of high-yield (less than investment grade) nonfinancial corporate debt has risen as well. BBB bonds currently make up around 57 percent of the investment-grade market compared to 40 percent just before the 2007-2009 recession.

Figure 3: Rising Issuance of Lower-Rated BBB Investment Grade Bonds Defines This Cycle’s Growth



Source: Bloomberg Barclays U.S. Corporate Bond Index, OCC Economics Department Calculations to exclude financial firms from index.

[4] Robert S. Kaplan, “Corporate Debt as a Potential Amplifier in a Slowdown,” Federal Reserve Bank of Dallas, (March 5, 2019), citing (i) data from Standard and Poor’s (S&P) Global Market Intelligence’s Leveraged Commentary and Data (LCD) and (ii) “Buybacks to Top Use of S&P 500 Companies’ Cash in 2019: Goldman Sachs,” Reuters, October 5, 2018.

[5] There are limits on firms’ capacity to borrow. As leverage rises, it becomes increasingly difficult for companies to borrow and finance expansionary capital spending as the cost of taking on additional debt rises and credit availability shrinks. Also, the accumulation of debt involves risk. As debt levels increase, borrowers’ ability to repay becomes progressively more sensitive to drops in income and sales and increases in interest rates. Over time, this results in steeper economic contractions and slower long-term growth on average. (Stephen G. Cecchetti, M.S. Mohanty, and Fabrizio Zampolli, (2011), “The Real Effects of Debt” BIS Working Paper No. 352. Also, Carmen M. Reinhart and Kenneth S. Rogoff (2008): “Banking Crises: An Equal Opportunity Menace,” NBER Working Paper, No. 14587).

The relative increase in BBB-rated issuance is largely attributable to the historically depressed interest rate environment that enabled even lower-rated companies to borrow cheaply and lengthen the maturity of their debt. And strategically, even higher-rated firms have often aggressively pursued mergers, acquisitions, and increased dividend payouts unconcerned about slightly higher funding costs if downgraded to BBB.[6] This has allowed companies to increase their leverage ratios and still maintain at least a BBB investment grade rating.[7]

Another component of debt markets that is a focal point for risk assessments is funding of commercial real estate. For example, in the 2005-2008 period, commercial mortgage debt of nonfinancial businesses rose at an average annual pace of 12 percent. In contrast, growth in this category of debt was relatively subdued over the course of 2020, increasing just 5 percent in the third quarter on a year-to-year basis.[8] Although the debt increase was modest, stress in servicing existing debt has garnered attention as commercial real estate, including the hospitality, office, and retail property sectors, was the most severely impacted by the COVID-19 economic fallout and could be at particular risk.

These developments represent a significant vulnerability for the economy, lenders, and the financial system. Given the high debt load in the nonfinancial business sector generally, coupled with a greater share of higher-risk borrowers, any renewed economic downturn and prolonged period of depressed sales could trigger widespread corporate financial stress and defaults. The same factors that allowed increased issuance of BBB and below investment-grade bonds could lead to downgrades that increase the borrowing costs and debt servicing for companies. These downgrades might create disruptions for investors who are bound by restraints based on credit-ratings and reduce liquidity in the market categories below BBB. As a result, credit spreads could widen and shrink access to funds for more highly indebted companies, similar to the turmoil in early 2020.[9]

There Is No U.S. Corporate Debt "Bubble"

Although nonfinancial business debt levels are high relative to historical experience, the United States is not in the midst of a corporate debt bubble that is likely to "burst." Why?

- As regards the debt surge during the first half of 2020, the first quarter growth was driven to a significant degree by companies drawing down revolving lines of credit to offset anticipated revenue and funding disruptions related to the COVID-19 recession. These loan extensions declined in the second and third quarters, however, as companies began repaying their credit lines and underwriting standards tightened.[10]

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[6] U.S. Corporate Credit Outlook 2020 "Balancing Act," (2019), S&P Global.

[7] S. Çelik, G. Demirtaş, and M. Isaksson (2020), "Corporate Bond Market Trends, Emerging Risks and Monetary Policy," OECD Capital Market Series, Paris.

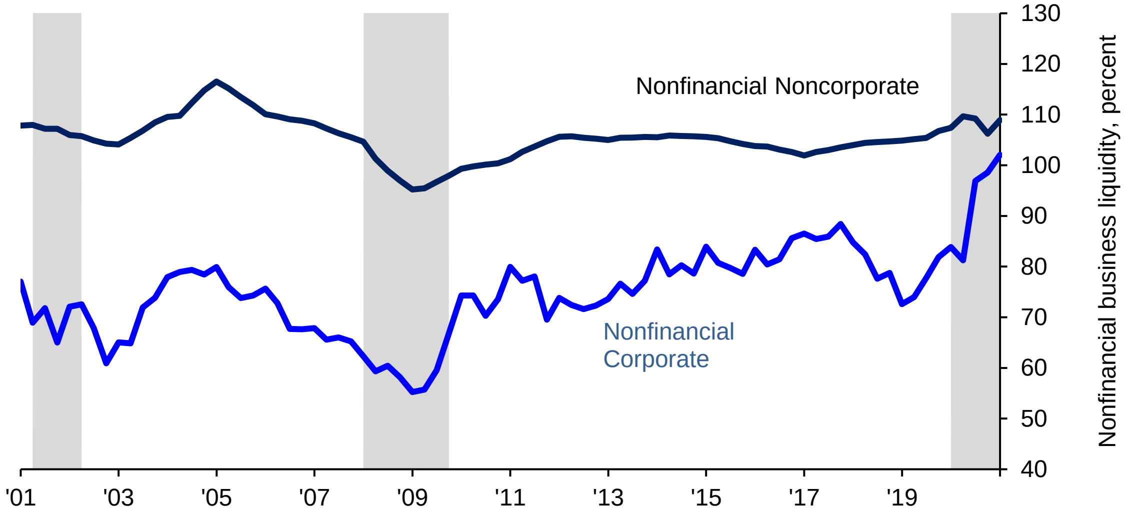
[8] Federal Reserve Board, "Financial Accounts of the United States – Z.1 release," fourth quarter 2020.

[9] Kaplan, "Corporate Debt as a Potential Amplifier in a Slowdown," Federal Reserve Bank of Dallas.

[10] Federal Reserve Board, *Financial Stability Report*, November 2020, section II, "Borrowing by Businesses and Households."

- The increase in nonfinancial business debt in the second quarter was powered by bank lending under the Paycheck Protection Program (PPP). Yet, the majority of these loans will be forgiven.[11] In January, the SBA announced it had granted nearly 85 percent of the applications for PPP loan forgiveness since the start of the program. Borrowers of $50,000 or less have enjoyed an even more favorable 88 percent forgiveness rate so far.
- An even greater portion of second quarter nonfinancial business borrowing was through new bond issuance. Interest rates were at historical lows encouraging firms to lock in lower borrowing costs. And since the second quarter, liquidity conditions in corporate bond markets improved and insolvency concerns dissipated, prompting still further bond issuance. This occurred despite the expiration of Federal Reserve Board support programs such as The Primary and Secondary Market Corporate Credit Facilities. Low interest rates allow companies to carry more debt without increasing the repayment burden.
- Nonfinancial businesses are now highly liquid, reaping the benefit of ratcheting back spending in favor of building a buffer stock of cash at the start of the pandemic (figure 4).

Figure 4: Nonfinancial Business Liquidity Improved During the Pandemic



Sources: Federal Reserve Board, Haver Analytics

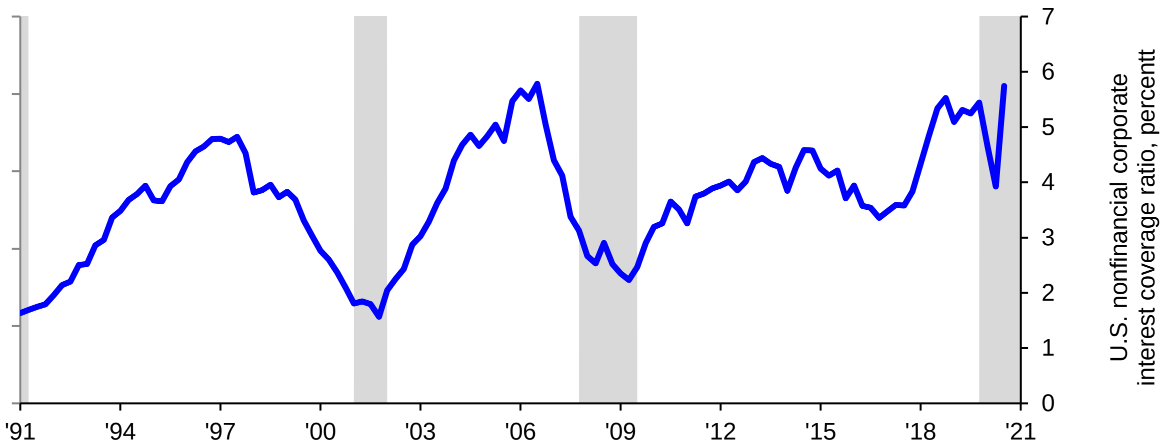
Note: Nonfinancial business liquidity is liquid assets divided by short-term liabilities.

- The low level of interest rates means that businesses can support more debt. The ratio of earnings-to-interest expenses (the interest coverage ratio) dropped sharply over the first half of 2020 (figure 5). This occurred due to a 42 percent decline (annual rate) in nonfinancial business earnings associated with the pandemic. But earnings rebounded by 329 percent (annual rate) in the third quarter and are now well above their peak fourth quarter 2019 level.[12] As a result, the interest coverage ratio for nonfinancial businesses is currently the highest it has been in decades.

[11] Ibid.

[12] Bureau of Economic Analysis, "Gross Domestic Product, (Third Estimate), GDP by Industry, and Corporate Profits, Fourth Quarter and Year 2020," March 25, 2021.

Figure 5: Interest Coverage Ratio Fully Recovered From Drop Early in Pandemic

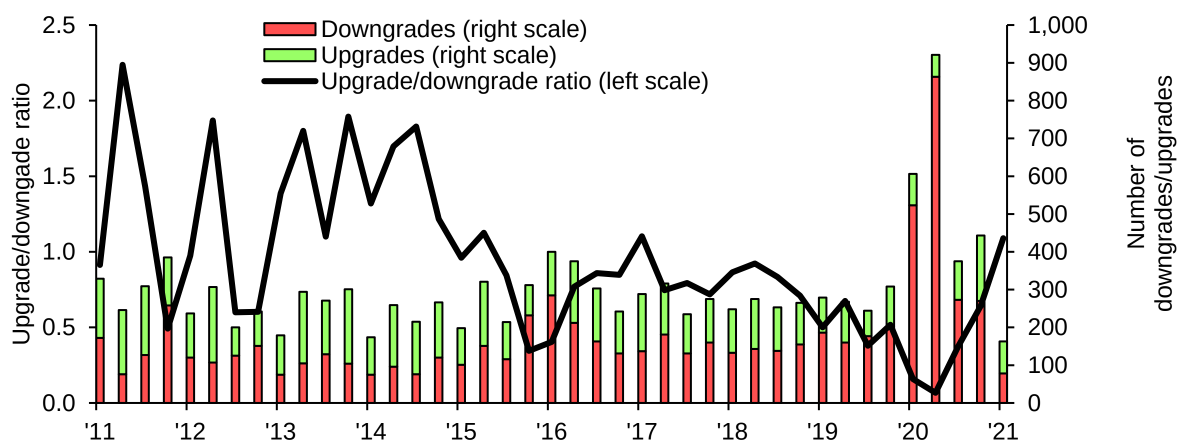


Source: Bureau of Economic Analysis; Haver Analytics

Note: Interest coverage ratio is defined as corporate profits with inventory valuation adjustment (IVA) and capital consumption adjustment (CCAdj) over net interest and miscellaneous payments.

- Credit quality shows signs of stabilizing following the credit deterioration at the onset of the pandemic when nonfinancial business earnings collapsed. Corporate downgrades surged over the first half of 2020 but came down sharply in the second half as the economy rebounded and financial market pressures eased (figure 6).[13] In the first quarter of this year, credit downgrades eased closer to pre-pandemic lows. Upgrades also rebounded and the "up/down" ratio of rating changes rose to over 100 percent for the first time since 2015 when the economy was in the midst of a strong economic expansion. And although the pace of downgrades picked up in 2020 from the prior year, the prevalence of downgrades remained below historical averages as shown in figure 7.[14]

Figure 6: S&P U.S. Corporate Ratings

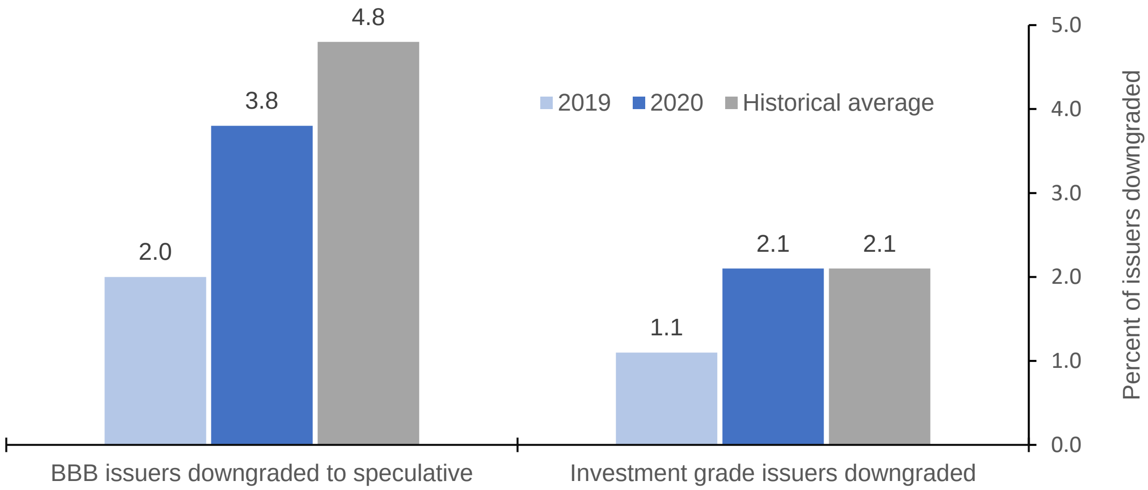


Source: Standard & Poor's, Bloomberg

[13] Federal Reserve Board, *Financial Stability Report*, November 2020, section II, "Borrowing by Businesses and Households."

[14] Default Trends—Global Annual Default Study: "Following a Sharp Rise in 2020, Corporate Defaults Will Drop in 2021," Moody's Investor Service, January 28, 2021.

Figure 7: BBB Issuers Downgraded to Speculative Still Below Historic Average Despite Up



Sources: Standard & Poor's, Bloomberg

- High-yield default rates began declining in January of this year after doubling from a pre-pandemic 4 percent to over 8 percent by the end of 2020. Defaults remain far below the 14 percent rate toward the end of the 2007-2009 recession, and Moody's projects that high-yield default rates will decline to under 8 percent by the end of 2021.[15]
- Finally, since the 2007-2009 recession, the supply of nonfinancial corporate funding flows may have become more stable. Direct household holdings of corporate bonds, which tend to be highly volatile, have shrunk from 20 percent to just 6 percent of total bonds outstanding. Meanwhile, the share of holdings by insurance companies, mutual funds, and the foreign sector, which are seen as more "patient" or long-term holders of U.S. corporate debt, has increased from 57 percent to 64 percent of total bonds outstanding.[16] This change in mix may add to the stability of corporate funding inflows.

All of these factors suggest the recent acceleration in corporate debt growth is not indicative of a bubble nor is there a high likelihood of a rapid exodus from corporate debt investment in the medium term.

The Point?

Nonfinancial business debt appears elevated relative to history, and a higher share of riskier borrowers are in the mix. But the United States is not in the midst of a corporate debt bubble that is likely to "burst."

[15] Ibid.

[16] Federal Reserve Board, "Financial Accounts of the United States – Z.1 release," fourth quarter 2020.