S&P Global
Ratings

Global Debt Leverage

Is a Great Reset Coming?

Rising rates and slowing economies mean the world's high leverage poses a crisis risk

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This report does not constitute a rating action

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Key Takeaways

- **Record leverage.** Global debt has hit a record $300 trillion, or 349% leverage on gross domestic product. This translates to $37,500 of average debt for each person in the world versus GDP per capita of just $12,000. Government debt-to-GDP leverage grew aggressively, by 76%, to a total of 102%, from 2007 to 2022.
- **Higher interest rates.** Debt servicing has become more difficult. Fed funds and European Central Bank rates are up an average of 3 percentage points in 2022. Assuming 35% of debt is floating rate, this means $3 trillion more in interest expenses, or $380 per capita.
- **Great Reset.** There is no easy way to keep global leverage down. Trade-offs include more cautious lending, reduced overspending, restructuring low-performing enterprises and writing down less-productive debt. This will require a "Great Reset" of policymaker mindset and community acceptance.

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The world's leverage is at a higher level than pre-global financial crisis (GFC) peaks. Yet demand for debt—to help consumers with inflation, mitigate climate change and rebuild infrastructure, for example—will continue. Rising interest rates and slowing economies are making the debt burden heavier. To mitigate the risk of a financial crisis, trade-offs between spending and saving may be needed.

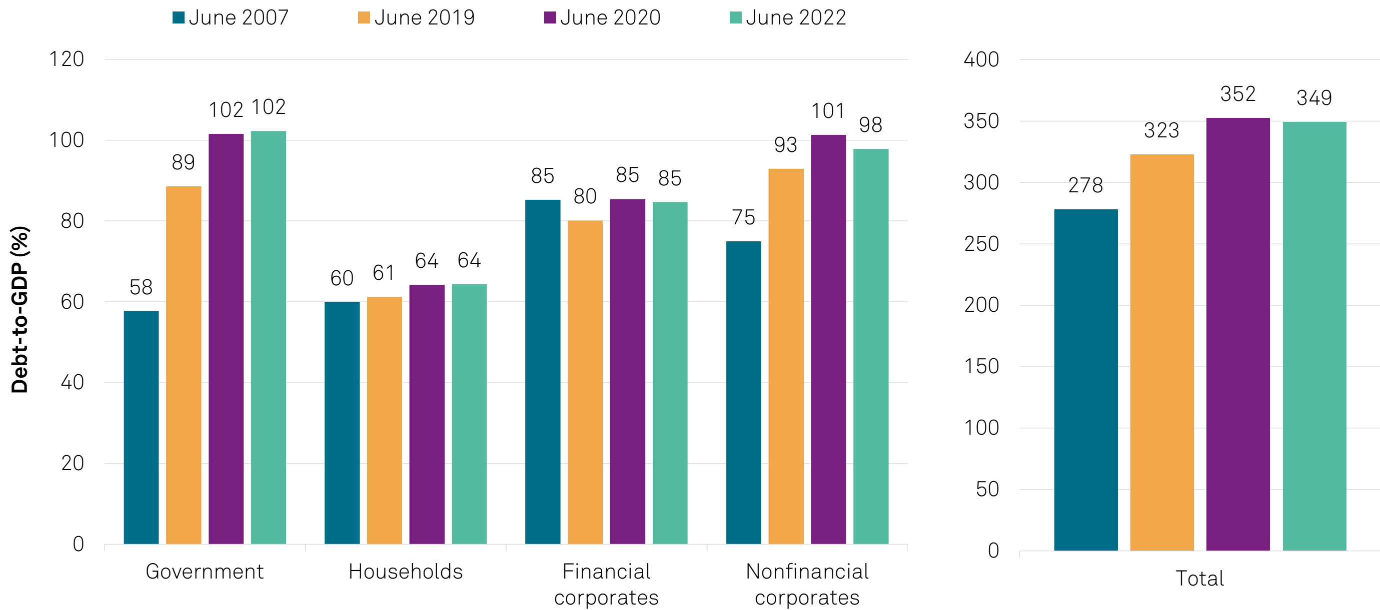
More Debt Than Ever Before

Three hundred trillion dollars. That is the record debt which global governments, households, financial corporates and nonfinancial corporates owe in June 2022, as estimated by the Institute of International Finance. The $300 trillion is equivalent to 349% of global gross domestic product, 26% higher than the pre-GFC figure of 278% (June 2007, see chart 1). The $300 trillion works out to **$37,500 of debt for every person** in the world, compared with a GDP per capita of just $12,000.

Chart 1

Global Leverage Still Much Higher Than Pre-GFC Despite Post-COVID Easing

Debt-to-GDP (%)



Data source: Institute of International Finance. Source: S&P Global Ratings.

Productivity from debt has declined. We see this from the upward trend of global debt-to-GDP ratios since the GFC. The economic value-add from every additional dollar of debt has decreased.

Leverage of the government sector has grown aggressively. The sector's debt-to-GDP ratio rose 76%, to a total of 102%, from 2007 to 2022. Mature market governments tend to be more leveraged (see table 1).

Nonfinancial corporates' ratio is up 31%, to 98%. Corporates in some European, Japanese, and emerging markets operate at higher leverage levels. China is of particular concern, as its debt makes up a third of global corporate debt. In a sample of more than 6,000 Chinese corporations, the average debt (net of cash) to earnings ratio was 6.0x in 2021, twice the global level. Meanwhile, the percentage of U.S. speculative grade issuers with ratings of 'B-' ratings and below doubled—to 36% in September 2022 compared with September 2007.

Household and financial sectors were more conservative. Household leverage grew just 7%, to 64%. The financial sector was flat, at 85%.

Table 1

Relative Leverage Risk Of Major Economies And Broad Sectors

	2022 GDP (Tril. US$)	Households	Nonfinancial corporates	Governments	Total nonfinancials	Financial sector	Total nonfinancials plus financial sector
Mature markets							
Australia	1.6	◆ 117	▲ 62	▲ 54	▲ 234	● 44	▲ 277
Canada	2.1	◆ 106	◆ 116	▲ 98	◆ 320	● 154	◆ 474
France	2.7	▲ 66	◆ 166	◆ 123	◆ 354	● 94	◆ 448
Germany	3.9	▲ 55	▲ 72	▲ 70	▲ 198	● 61	▲ 259
Italy	1.9	● 42	▲ 69	◆ 154	▲ 266	● 48	▲ 314
Japan	4.2	▲ 64	◆ 117	◆ 251	◆ 433	▲ 217	◆ 649
Spain	1.3	▲ 57	▲ 100	◆ 123	▲ 279	● 41	▲ 321
U.K.	3.0	▲ 83	▲ 66	◆ 110	▲ 260	● 173	◆ 433
U.S.	24.2	▲ 78	▲ 81	◆ 122	▲ 281	● 78	▲ 359
Euro area	13.1	▲ 59	◆ 110	◆ 107	▲ 275	● 113	▲ 389
Total mature markets	**50.8**	▲ **75**	▲ **96**	◆ **124**	▲ **295**	● **112**	◆ **407**
Emerging markets							
Brazil	1.8	● 32	▲ 53	▲ 89	▲ 174	● 40	▲ 214
China	17.5	▲ 63	◆ 157	▲ 76	▲ 297	● 50	▲ 347
India	3.1	● 39	▲ 51	▲ 83	▲ 173	● 3	▲ 176
Indonesia	1.2	● 16	● 25	● 38	● 79	● 7	● 87
Korea	1.6	◆ 102	◆ 118	▲ 48	▲ 268	● 89	▲ 357
Mexico	1.5	● 16	● 24	● 39	● 78	● 13	● 91
Russian Federation	2.8	● 20	▲ 75	● 17	● 113	● 6	● 119
Total emerging markets	**38.6**	▲ **47**	◆ **102**	▲ **66**	▲ **214**	● **38**	▲ **252**
Global	**89.4**	▲ **64**	▲ **98**	◆ **102**	▲ **264**	● **85**	▲ **349**

Note: Red diamond denotes the highest risk sextile; yellow triangle, the third to sixth sextiles; and green circle, the fifth to sixth sextiles. Sextile thresholds of households, nonfinancial corporates, governments and financial sector are set at one-third that of total nonfinancials. Other mature and emerging market economies besides those listed in the table are included in totals. Data source: Institute of International Finance. Source: S&P Global Ratings.

Why Is This a Risk?

Higher returns required. Central banks are raising policy rates, and investors are demanding higher yields, in response to inflation. We see 2022 as the inflexion point of the monetary environment moving away from low interest rates and easy money. Higher yields imply a repricing of assets while tighter money could translate to lessened market liquidity.

Three trillion more dollars. Higher interest expenses are already straining less-creditworthy governments and corporates, and lower-income households. The fed funds rate went up nearly 4 percentage points in 2022, and the European Central Bank rate by 2 pp (see chart 2). Applying the average of the two rates (3 pp) on the floating-rate portion of debt (we assume 35% of debt is floating and 65% is fixed) implies an additional annual interest expense of $3 trillion (see chart 3). This is equivalent to $380, or 3% of GDP, per capita, on average debt of $37,500. As fixed-rate debt is increasingly refinanced, this amount will rise over time to $8.6 trillion, or $1,080 per capita.

Chart 2

Fed Funds Up Almost 4 Percentage Points; ECB, 2.

Policy interest rate increase in 2022 (ppt)

Fed funds rate | ECB fixed-rate tenders (fixed rate)

Data sources: Federal Reserve Bank of St. Louis (FRED) and European Central Bank. Source: S&P Global Ratings.

Chart 3

Extra $3 Trillion In Interest, Up To $8.6 Trillion Over Time

Additional interest expense (US$ trillion)

Floating debt rate | After all fixed rate is refinanced

Source: S&P Global Ratings.

Repricing and project thresholds. Rising interest rates influence asset pricing and project viability. The price of an asset is, in theory, its discounted cash flow. Unsurprisingly, the stock market corrected in 2022. The S&P 500 index price-to-earnings ratio (PE) was 29x at the end of November 2021, implying a 3.5% discount rate (inverse of PE). This rate is about the average yield for U.S. 'BB' corporate bonds in 2021. The PE is now 19x, implying a 5.2% rate—slightly below the 'BB' yield in2022. Previously, borrowers were able to take on low-return projects because of low interest rates. Such projects now require higher return thresholds, making them less viable. This development will add to financial pressures on borrowers and dampen future business activity volumes.

No Easy Way Out

Three scenarios. We examine three possible scenarios to year 2030 of the global debt leverage trend—base case, pessimistic, and optimistic.

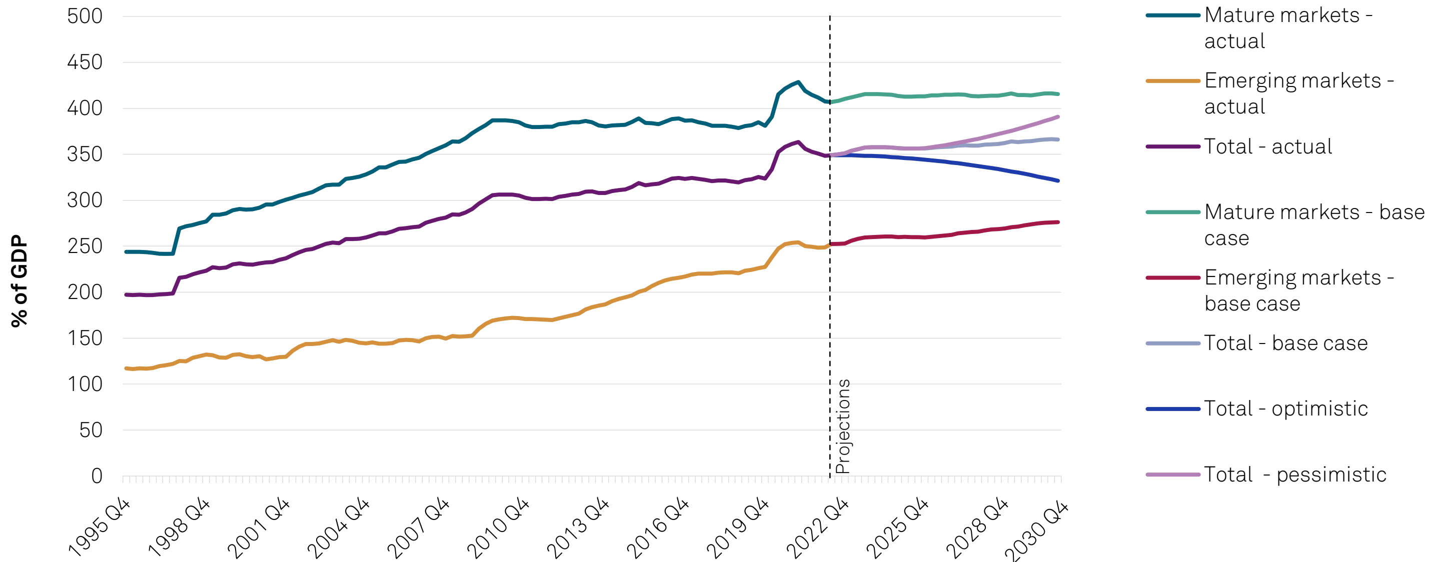
- **Base case.** Our base-case scenario assumes global total debt leverage over the next eight years, by 2030-end, will grow by 5%, which is about the same rate as that for the eight-year period before COVID-19 hit in 2020. We see the leverage rising slightly faster for mature markets than for emerging markets, as we expect more GDP growth upside for the latter markets. Altogether, the projected global debt-to-GDP ratio could reach 366% in 2030 (see chart 4) versus June 2022's 349%. For rated sovereigns, our base case sees the total gross debt-to-GDP ratio of mature market sovereigns rising marginally to 107% by 2025 from 106% in 2022. For emerging markets, the projected ratio remains roughly flat at 65%. (We use the Institute of International Finance's definitions of mature and emerging markets.)
- **Pessimistic.** If global borrowers freely take on more less-productive debt, for example, because governments give in to populist demands or lenders are overly desperate to book assets, the projected debt-to-GDP ratio could hit a much more worrying 391% by 2030, up 12% from June 2022's 349%.
- **Optimistic.** What if governments and regulators collectively decide to manage their economy's leverage down, with a goal to return to pre-COVID-19 levels by 2030? In this optimistic scenario, the debt-to-GDP ratio would decline by 8% to 321% by 2030-end. The ratio in the first

quarter of 2019 was 321%. This does not imply that no new debt is formed, but rather that productive new debt replaces unproductive old debt.

Chart 4

It Will Take A Lot Of Discipline And Coordination To Reduce Global Leverage By 2030

Global total government, household and nonfinancial corporate debt as a percentage of GDP (%)



Data source: Institute of International Finance. Source: S&P Global Ratings.

Is This Optimistic Scenario Possible?

- Governments had to spend money during the 2020 COVID-19 crisis to support their economies. As economic activity recovers, less debt needs to be issued, which should improve leverage.
- Low interest rates and easy access to credit allowed some corporates to overborrow. Lenders should logically be cutting back on such risky borrowers.
- An alternate source of funding for business is, of course, equity. The low interest rate environment had encouraged many companies to lever up rather than raise equity. Some even elected for share buybacks (effectively gearing up) during the stock market bull run. The current higher cost of funds environment could trigger a debt-equity rebalance.

Not all debt is bad. There are good reasons to take on additional debt. Emerging markets are still climbing the economic development ladder. Many governments may help more vulnerable peoples and businesses to cope with surging food and energy prices. Governments, corporates and households will have to pay for more frequent extreme weather events and climate change mitigation. Countries will need to develop new infrastructure to adapt to a low-carbon and digital economy.

Leverage can't grow forever. As Carl Jung said: “No tree, it is said, can grow to heaven unless its roots reach down to hell.” Avoiding the hell of a debt crisis may require ensuring only productive new debt is deployed, writing down unproductive debt, curbing overconsumption and restructuring loss-making enterprises. These actions may not be popular. A “Great Reset” of community acceptance of more judicious spending and policymaker caution about debt may be needed. There is no easy way out.

Is The Current Banking Turmoil Signaling The Onset Of The Great Reset?

Since publication of this article on RatingsDirect, on March 20, 2023, three U.S. regional banks have collapsed and Swiss authorities have brokered the takeover of a global systemically important bank. Will this accelerate risks highlighted in this report?

We do not anticipate significant broad-based contagion. The decisive actions by public authorities and the recognized specificity of the issues behind the Silicon Valley Bank (SVB) and Credit Suisse shocks have thus far averted global contagion to the global banking system. We do however anticipate a visibly tighter risk appetite by financial institutions, which could translate into higher funding costs and more conservative underwriting policies. Higher interest rates is a double-edged sword. Many banks are reporting improved profitability off the back of better net interest margins, a trend we think will solidify and continue. But higher rates are also putting some borrowers under pressure which will result in higher nonperforming assets. While the issue of interest rate risk management was a key factor in the SVB case, we do not see weaknesses contributing to the default of SVB as endemic. This includes in the U.S. and Japan, where we see interest-rate risks as more notable.

--Gavin Gunning, Emmanual Volland, Alexandre Birry

Related Research

- Global Debt Leverage: Cash Flow Negative Corporates Could Double In 2023, Dec. 12, 2022
- Global Debt Leverage: How Heavy Is The World's Debt Burden?, Nov. 21, 2022
- Global Debt Leverage: China's SOEs Are Stuck In A Debt Trap, Sept. 20, 2022
- Global Debt Leverage: If Stagflation Strikes, Loss-Making Corporates Will Double Globally, July 12, 2022

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