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The Dominoes of Debt Limit Default







Takeaways

- If Republican brinksmanship forces the United States to default on its debt, it will have brutal and wide-ranging consequences for families and the US economy.
- The United States could shed as many as 3 million jobs—undoing nine months of employment growth.
- A typical worker near retirement with 401(k) savings could lose \$20,000.
- The average new 30-year mortgage would cost an additional \$130,000.
- It would become harder to borrow for everything from small business loans to student loans.

- American consumers will see higher price tags for everyday items.
- The national debt would increase by \$850 billion.

The debt limit isn't just an academic concept. Breaching the debt limit would be more harmful to the US economy than the 2008 Lehman Brothers collapse, according to S&P Global's chief economist. ¹ It would be a self-inflicted economic catastrophe.

The consequences of default would reach every corner of the US economy. It would be enough to push the United States back into a recession. ² The closer we get to default, the greater the consequences for federal spending, consumer confidence, and private sector activity.

Republican leaders continue to call for using the debt limit as a political hostage. This is despite their record of supporting increases in the debt limit when President Trump increased the national debt by \$4 trillion, outside of emergency COVID aid. In comparison, under President Biden, non-COVID debt increased by \$2.3 trillion. What Republican leaders fail to acknowledge, however, is that the debt is the result of policies already in place—from Trump's tax law to other spending. If we do not increase it when the nation reaches the borrowing limit in 2023, there will be serious implications. ³

In previous reports, we explored six tangible effects of default for middle-class families and Main Street businesses in the United States. Updated projections are now included below. Because we have never intentionally defaulted on our obligations because of the debt limit, these effects are projections based on a series of macroeconomic factors noted below. Some effects would begin before an actual default as markets get nervous. All effects would be worse the longer the default drags on, and the damage could vastly exceed the numbers projected in this report.

Domino Effects: Six Consequences of Default 1. The United States would shed 3 million jobs.

Between the interest rate effects and the limitations the federal government will have on sending out payments to everyone from Social Security recipients to federal contractors, the US economy will take a hit. And an economic contraction can have serious implications for families and workers across this country:

- J.P. Morgan in 2011 estimated that higher Treasury rates (in the magnitude of 0.5% as a result of a technical default) would cause our GDP growth to slow by one percentage point. ⁴
- In 2021, Moody Analytics estimated that a month-long default could result in a swift economic drop of 6.6% compared to baseline.

• For every 1% decrease in GDP growth, there is roughly an 0.5% increase in the unemployment rate, according to an economic concept known as Okun's Law. Using this estimation, if one assumed an economic hit in the middle of those two estimates, the **United States would shed approximately 3 million jobs**—the equivalent of the last nine months of employment growth. ⁶

And, unlike at nearly all other times during the pandemic, it would be difficult to expect forthcoming fiscal stimulus to counteract this effect due to divided government and our current levels of inflation.

2. A typical worker near retirement would lose \$20,000 in savings.

A Treasury report on the macroeconomic effects of approaching the debt limit found that the 2011 debt limit debacle led to a 17% decline in the S&P 500 index. ⁷ A report Moody's released last year has an even more calamitous prediction, forecasting that just a short-term debt default could lead to a 27% drop. What might a loss somewhere in the middle of these two predictions mean for the average personal investor?

According to Vanguard, the typical 401(k) of an individual investor nearing retirement age contains \$232,379. ⁸ US equities, like those in the S&P 500, represent 40% of an example lifecycle fund targeting retirement in 2030. ⁹ Because of that, a 22% loss in the S&P 500 would cost the typical retirement portfolio about \$20,000.

With approximately 60 million US workers invested in 401(k) plans, these losses would hurt households in every American community. ¹⁰ And that's not all. If the country defaults, investors could start selling assets—leading to prices spiraling down on all types of securities, including stocks, bonds, and real estate. We last experienced mass liquidation during the financial crisis. From July 2008 to March 2009, the United States lost \$7.4 trillion in stock wealth—nearly \$66,200 per household. ¹¹

3. Average mortgages would cost an additional \$130,000.

The rate that Americans pay for a mortgage is generally tied to the interest rate on Treasury bonds. Since the end of the 2007–2009 recession, 30-year mortgage rates have been around 1% higher than 30-year Treasury bonds, on average. ¹² The difference between these two rates is known as a "spread." The Moody's report predicts that a default could lead Treasury bond rates to surge by 1.46%. This means mortgage rates could shoot up by a similar amount.

What would this mean for the average homebuyer at this time?

• At the beginning of December 2022, the average 30-year mortgage interest rate was 6.49%. ¹³

• A 1.46% interest rate increase from 6.49% to 7.95% for a 30-year fixed mortgage would add approximately \$130,000 to the lifetime cost on a median new home loan of \$363,920 (assuming a 20% down payment on a home valued at \$454,900, the median US home sale price from Q3 of 2022). 14

Considering today's high prices and higher mortgage rates, any increase in rates might price out buyers even more.

4. It would be harder for small businesses and consumers to borrow.

Once the dominoes of default—rising Treasury bond rates, declining stock markets, rising mortgage rates—begin to fall, lending to small businesses and consumers will constrict.

Why would lending tighten? In short, there would be less money made available to people and businesses to borrow. This liquidity shortage would be a direct result of uncertainty and volatility in the markets. When there is economic uncertainty and volatility, credit gets squeezed because banks want to keep as much money in reserve as they can.

What credit is still available would be more costly because banks would increase their interest rates on loans. Small business owners would have a difficult time getting a loan from their bank for start-up costs or business expansion, or they would have to pay increased rates.

Consumers would have trouble securing a car, student, or personal loan. Credit card rates—which are also tied to Treasury rates—would rise, making purchases more expensive and resulting in depressed retail sales. Less spending by consumers and small businesses could help send the economy into a recession.

5. American consumers would see higher price tags on many everyday items.

In many ways, the US dollar is just like any other commodity that is bought and sold. When there are more sellers than borrowers, its price and status drops.

Foreign holdings of US dollars are enormous because the dollar is the world's "reserve currency." Countries keep trillions of American dollars in reserve in case of economic or national security emergencies. For example, China has \$970 billion and Japan has \$1.20 trillion of US Treasury Securities in reserves. ¹⁵ If a foreign government undergoes an economic upheaval, it can dig into its reserve of American dollars and weather the storm. According to the International Monetary Fund, the US dollar's share of other countries' official foreign exchange reserves has held steady around 60–65% since the financial crisis. ¹⁶

But political and economic volatility in the form of a US default would compel investors to sell some of their holdings. According to *The Economist*, "The defeat of proposed legislation, the election of a

particular politician or the release of an unexpected bit of economic data may all cause a currency to strengthen or weaken against the currencies of other countries." ¹⁷

A US default may cause institutional investors and sovereign wealth funds to hedge what currency their reserves should be held in. Special status can be revoked; the British pound was formerly the dominant currency for trade, but the dollar became the currency of choice after the UK amassed a huge debt due to the costs of World War I.

What might that mean on Main Street? On the one hand, if the US dollar loses its "special status" and the value of the dollar decreases, exports like commercial airplanes and cars become cheaper to the rest of the world. The downside is more significant. Imports like electronics become more expensive, with increased costs likely to be passed on to consumers.

6. The national debt would increase by \$850 billion.

The US government does not collect enough taxes to directly pay for its spending with cash on hand, so it must take on debt and sell bonds. Typical buyers of bonds are institutional investors (like pension funds), foreign countries (often sovereign wealth funds or financial institutions serving foreign nationals), and individuals (usually through mutual funds and 401(k) accounts).

US government debt is the most relied-upon asset in the world given its enormous size, liquidity, and transparency. Treasury securities are one of the lowest-cost and widely used forms of collateral for financial transactions. Investors believe that US debt is "safe" because historically, there's been virtually no chance that the United States government would ever default on these loans, and because the US economy is large and dynamic. In fact, Treasury bonds are considered to be as safe as cash throughout the financial sector. As a result, Treasury bonds pay a very low rate of return, commonly referred to as the "risk-free rate." Low risk means low interest rates.

If the government defaults or comes close to defaulting, credit rating agencies would likely downgrade the rating of Treasury bonds. In 2011, the mere threat of default prompted the credit rating agency Standard & Poor's to downgrade the United States from its AAA rating to AA+ for the first time in 70 years. ¹⁸ A downgrade by all of the big three rating agencies—S&P, Fitch, and Moody's—would likely indicate the United States would have to raise the interest rate it offers for these bonds in order to get investors to continue buying them. This is because their #1 draw—a risk-free investment—would now be a fallacy.

Default would mean the cost of borrowing for the US government would increase, perhaps dramatically. And when its more expensive for the government to borrow, it will be more expensive for individuals to borrow.

There are multiple credible estimates of the impact of default on interest rates in the United States:

• In 2011, J.P. Morgan and PIMCO estimated that a technical default would lift the rate on Treasuries by half a percentage point (0.5%). ¹⁹

- Additionally, the 2013 debt limit scare showed that Treasury rates could rapidly rise by that
 amount even without an actual default. A Government Accountability Office report concluded
 that the threat of default in 2013 catapulted market yields on US Treasuries from 0.01% to
 0.5%. ²⁰
- Last year, Moody's Analytics estimated that a more prolonged debt limit standoff (of up to a month) would be disastrous and increase interest rates by 1.46 percentage points in the short run, and permanently increase rates to the tune of 0.27%. ²¹
- If interest rates went up on par with Moody's Analytics' estimate, it would mean perversely that a default would actually increase the national debt by \$850 billion, on top of growing projected debt within a decade. ²²

Conclusion

The United States will hit the debt limit in 2023. But incredible uncertainty exists around the willingness of Republicans in the 118th Congress to step up and help avoid the certain economic Armageddon that will happen if we do not raise it. Statements indicate they will play a game of chicken—one which will ensure that if the United States defaults, there will be economic turmoil. ²³ And even a brief default could throw so much sand in the gears of our economy that another much worse scenario might play out—including a financial crisis or recession.

Everything from missed Social Security payments to increased costs of mortgages to losses in 401(k)s would mean average Americans will eventually have to deal with the consequences. Policymakers must come to the table and figure out a solution before the dominoes of default begin to fall.

This paper is an updated version of the previous reports "The Dominoes of Default" and "The Dominoes of Default, 2013," authored by Jim Kessler and Lauren Oppenheimer, "The Dominoes of Default, 2015," authored by David Brown and Tanner Daniel, "The Dominoes of Default" authored by David Brown and Emily Liner, and "The Dominoes of Default, 2021" authored by Zach Moller and Curran McSwigan.

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ENDNOTES

- Tankersley, Jim. "America's Need to Pay Its Bills Has Spawned a Political Game." The New York Times, 25 Sept. 2021, https://www.nytimes.com/2021/09/26/business/economy/america-debt-limit-political-game.html. Accessed 29 Nov. 2022.
- **2.** Lane, Sylvan. "Yellen warns default on national debt would cause recession." *The Hill*, 5 Oct. 2021, https://thehill.com/policy/finance/575343-yellen-warns-default-on-national-debt-would-cause-recession. Accessed 29 Nov. 2022.
- 3. Authors' calculations based on "Comparing President Trump's Record to His 2016 Agenda."

 Committee for a Responsible Federal Budget, 9 Sep. 2020, https://www.crfb.org/papers/comparing-president-trumps-record-his-2016-agenda. Accessed 29 Nov. 2022; And "The Biden Administration Has Approved \$4.8 Trillion of New Borrowing." Committee for a Responsible Federal Budget, 13 Sep. 2022, https://www.crfb.org/blogs/biden-administration-has-approved-48-trillion-new-borrowing. Accessed 29 Nov. 2022. See also: Rattner, Steven. "The Huge Problem That Nobody Cares About." New York Times, 4 Nov. 2022, https://www.nytimes.com/2022/11/04/opinion/national-debt-spending.html. Accessed 29 Nov. 2022.
- **4.** Belton, Terry et al. "The Domino Effect of a US Treasury Technical Default." Research Note, J.P. Morgan, 19 Apr. 2011, p.5. https://valkayec.files.wordpress.com/2011/04/morgan.pdf. Accessed 29 Nov. 2022.
- **5.** Zandi, Mark and Bernard Yaros. "Playing a Dangerous Game With the Debt Limit." *Moody's Analytics*, 21 Sept. 2021, https://www.moodysanalytics.com/-/media/article/2021/playing-a-dangerous-game-with-the-debt-limit.pdf. Accessed 29 Nov. 2022.
- **6.** Authors' calculations based on United States, Department of Labor, Bureau of Labor Statistics. "Table A-1: Employment status of the civilian population by sex and age." Economic News Release, Oct. 2022, http://www.bls.gov/news.release/empsit.to1.htm. Accessed 29 Nov. 2022.
- 7. United States, Department of the Treasury. "The Potential Macroeconomic Effect of Debt Ceiling Brinkmanship." Oct. 2013, p. 4-5.
 https://www.treasury.gov/initiatives/Documents/POTENTIAL%20MACROECONOMIC%20IMPACT%20OF%20DEBT%20CEILING%20BRINKMANSHIP.pdf. Accessed 29 Nov. 2022.
- **8.** Suknanan, Jasmin. "Here's the average 401(k) balance of Americans in their 50s and 60s how do you compare?" CNBC, 25 Apr. 2022, https://www.cnbc.com/select/average-401k-balance-of-americans-in-50s-and-60s/. Accessed 29 Nov. 2022.
- **9.** "Vanguard Target Retirement Funds." *The Vanguard Group*. https://investor.vanguard.com/mutual-funds/profile/VTHRX. Accessed 29 Nov. 2022.
- **10.** "Frequently Asked Questions About 401(k) Plan Research." *Investment Company Institute*, 11. Oct. 2021. https://www.ici.org/faqs/faq/401k/faqs_401k. Accessed 29 Nov. 2022.

- **11.** Swagel, Phillip. "The Cost of the Financial Crisis: The Impact of the September 2008 Economic Collapse." Briefing Paper No.18, *Pew Economic Policy Group*, 28 Apr. 2010, p. 14, http://www.pewtrusts.org/our_work_report_detail.aspx?id=58695. Accessed 29 Nov. 2022.
- **12.** Authors' Calculations based on Federal Reserve Bank of St. Louis Economic Research (FRED). "Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity [DGS30]," and "30-Year Fixed Rate Mortgage Average in the United States [MORTGAGE30US]." https://fred.stlouisfed.org/series/MORTGAGE30US. Accessed 29 Nov. 2022.
- **13.** Federal Reserve Bank of St. Louis Economic Research (FRED). "30-Year Fixed Rate Mortgage Average in the United States [MORTGAGE30US]." https://fred.stlouisfed.org/series/MORTGAGE30US. Accessed 29 Nov. 2022.
- **14.** Authors' calculations based on Federal Reserve Bank of St. Louis Economic Research (FRED). "Median Sales Price of Houses Sold for the United States." https://fred.stlouisfed.org/series/MSPUS. Accessed 29 Nov. 2022.
- **15.** United States, Treasury Department. "Major Foreign Holders of Treasury Securities." http://ticdata.treasury.gov/Publish/mfh.txt. Accessed 29 Nov. 2022.
- "Currency Composition of Official Foreign Exchange Reserves (COFER)." International Monetary Fund, http://data.imf.org/?sk=E6A5F467-C14B-4AA8-9F6D-5A09EC4E62A4. Accessed 9 Nov. 2021. See also Prasad, Eswar. "The Dollar Reigns Supreme, by Default." International Monetary Fund, March 2014, Vol. 51, No. 1. Mar. 2014, http://www.imf.org/external/pubs/ft/fandd/2014/03/prasad.htm. Accessed 29 Nov. 2022.
- **17.** Levinson, Marc. "Guide to Financial Markets." *The Economist*, 2005, 4th ed., p. 24. https://docs.google.com/file/d/oB_Qxj5U7ea]TZTJkODYzN2ItZjE3Yy00Y2MoLTk2ZmUtZGU0NzA3NG14Y2Y5/edit?usp=drive_web&pli=1&hl=en. Accessed 29 Nov. 2022.
- **18.** Paletta, Damian and Matt Phillips. "S&P Strips U.S. of Top Credit Rating." *The Wall Street Journal*, 6 Aug. 2011, https://www.wsj.com/articles/SB10001424053111903366504576490841235575386. Accessed 29 Nov. 2022.
- **19.** Belton, Terry et al. "The Domino Effect of a US Treasury Technical Default." Research Note, *J.P. Morgan*, 19 Apr. 2011, p. 5, https://valkayec.files.wordpress.com/2011/04/morgan.pdf. Accessed 29 Nov 2022. See also: Montgomery, Lori and Brady Dennis. "Treasury quietly plans for failure to raise debt ceiling." *The Washington Post*, 26 Apr. 2011, http://www.washingtonpost.com/business/economy/treasury-quietly-plans-for-failure-to-raise-debtceiling/2011/04/21/AFmo5PtE_story.html. Accessed 29 Nov. 2022.
- **20.** United States, Government Accountability Office. "Debt Limit: Market Responses to Recent Impasses Underscores Need to Consider Alternative Approaches." Report, July 2015, p. 16. http://www.gao.gov/assets/680/671286.pdf. Accessed 29 Nov. 2022.
- **21.** Zandi, Mark and Bernard Yaros. "Playing a Dangerous Game With the Debt Limit." *Moody's Analytics*, 21 Sept. 2021, https://www.moodysanalytics.com/-/media/article/2021/playing-a-dangerous-game-with-the-debt-limit.pdf. Accessed 29 Nov. 2022.

- 22. Authors' calculations based on Zandi, Mark and Bernard Yaros. "Playing a Dangerous Game With the Debt Limit." *Moody's Analytics*, 21 Sept. 2021,

 https://www.moodysanalytics.com/-/media/article/2021/playing-a-dangerous-game-with-the-debt-limit.pdf. Accessed 29 Nov. 2022; And Congressional Budget Office. "Workbook for How Changes in Economic Conditions Might Affect the Federal Budget: 2022 to 2032." 8 Jun. 2022,

 https://www.cbo.gov/publication/57980. Accessed 29 Nov. 2022.
- **23.** Dennis, Steve T. and Anstey, Christopher. "House Republicans Plan to Hold the Debt Limit Hostage Against Joe Biden." Bloomberg, 28 Oct. 2022, https://www.yahoo.com/now/house-republicans-plan-hold-debt-100001059.html. Accessed 29 Nov. 2022.