

Growing government debt has raised concerns. Should it?

From the Field
August 2024

Key Insights

- Rising sovereign debt levels in developed markets have increased concerns about when and how much debt is too much. In our view, it's not time to worry yet.
- Attention to debt sustainability in G10 nations has been piqued as higher interest costs and large deficits weigh on debt metrics.
- We view the U.S., UK, France, Italy, and Japan as the most vulnerable economies and discuss investment implications for their options to address their debt.

Debts incurred to support economies during the global financial crisis and the pandemic have pushed developed market countries' debt-to-gross-domestic-product (GDP) ratios to historical peace-time highs. Currently, public debt-to-GDP ratios for developed market countries are just over 100% on average, which is raising concerns about whether current levels of debt are too high for the debt ratios to stabilize. Issues such as some weaker U.S. Treasury auctions and significant elections in France, the UK, and the U.S. have heightened attention to the subject of debt sustainability.

But how much debt can a nation carry sustainably? Researchers have attempted to pinpoint a threshold public debt-to-GDP ratio that would lead to fiscal dominance,

which is when a nation's debt and deficit become so large that they blunt monetary policy's ability to effectively control inflation. The answer is not clear, forcing policymakers to select what they deem appropriate for their respective countries. The European Union (EU) has instituted fiscal rules for member states that require a less than 60% public debt-to-GDP ratio. In contrast, the Penn Wharton Budget group estimated that 200% is the likely threshold for the U.S.

Why does it matter?

Generally, as debt-to-GDP ratios rise, so do the economic costs (crowding out investments) as governments have to spend more on interest expenses, leaving fewer resources to allocate to other uses.



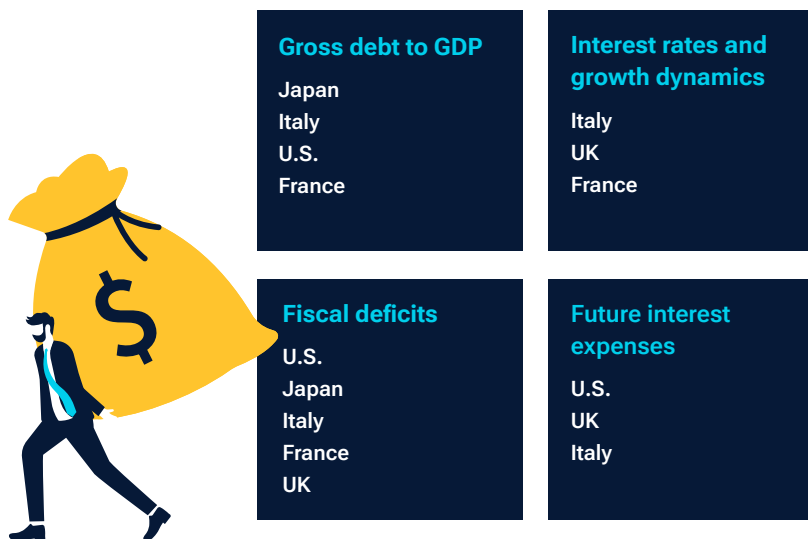
Thomas Kasanin, CFA
Fixed Income Credit Analyst



Ivan Morozov, CFA
Sovereign Analyst

Four key debt dynamics and the countries most at risk

(Fig. 1) Each country's debt dynamics present unique issues.



As of July 2024.
Source: T. Rowe Price.

This blunts growth potential, which would further pressure debt-to-GDP metrics by lowering GDP growth.

In general, debt sustainability is a function of a country's primary fiscal balance—the government's revenues minus expenses excluding interest payments, its real growth rate (g), and its real interest rates (r), i.e., average interest rate of government debt less inflation rate. If real rates are higher than real growth, debt ratios will rise without a primary surplus. However, if real growth is higher than real rates, debt ratios can fall—or the economy could support a small primary fiscal deficit. In other words, to keep public debt-to-GDP ratios from growing, a country's fiscal balance must be in line with the difference between real interest rates and real growth rates.

Which nations are most vulnerable?

We analyzed developed nations' debt dynamics in several ways to determine which countries seem most at risk:

Large gross debt to GDP. Public debt-to-GDP figures provide an overview of which economies could be carrying too much debt. Several developed market countries have debt-to-GDP ratios over 100%, most notably Japan at over 250%, the highest level in the world. Italy, the U.S., and France each carry ratios over 110%.

Interest rate and growth dynamics. The relationship between real interest rates and real growth rates influences an economy's ability to contain debt depending on the country's primary balance. Italy appears to be under the most pressure to constrain its fiscal balance due to its structurally low growth rate and higher market interest rates. The UK and France similarly have higher real interest rates than real growth rates, highlighting one of the risks of increasing debt.

Fiscal deficits. Without supportive growth and interest rate dynamics, fiscal deficits will add to debt levels. The U.S., Japan, Italy, France, and the UK all run significant fiscal deficits, with the U.S.'s yawning 8.8% of GDP deficit¹ leading the group.

“ Without supportive growth and interest rate dynamics, fiscal deficits will add to debt levels.

¹ 2023 figures. Source: IMF World Economic Outlook database, April 2024.

Debt and interest expense largely worsen

(Fig. 2) Debt-to-GDP and interest expense ratios increase

Debt to GDP (%)			■ Worsening	■ Improvement	
	2024	2030 (E)	Change	2050 (E)	Change
U.S.	125.0	139.7	14.8	177.5	52.5
UK	96.5	96.6	0.1	91.4	-5.1
France	109.5	114.4	4.9	134.7	25.2
Italy	140.6	150.2	9.6	209.2	68.6
Japan	250.8	260.4	9.6	303.1	52.3

Interest as a share of revenue (%)

	2024	2030 (E)	Change	2050 (E)	Change
U.S.	13.2	13.8	0.6	16.2	2.9
UK	7.6	7.3	-0.3	6.4	-1.2
France	3.8	4.6	0.8	6.1	2.3
Italy	8.9	10.3	1.4	14.9	6
Japan	3.9	5.5	1.6	8.1	4.2

As of March 2024.

Shading represents intensity.

Source: European Commission AMECO database.

Projected estimates (E) are based on T. Rowe Price assumptions regarding future economic growth, inflation, and interest rates. T. Rowe Price cautions that economic estimates and forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Actual outcomes could differ materially from those anticipated in estimates and forward-looking statements, and future results could differ materially from historical performance. The information presented herein is shown for illustrative, informational purposes only. Any historical data used as a basis for analysis are based on information gathered by T. Rowe Price and from third-party sources and have not been verified. Forecasts are based on subjective estimates about market environments that may never occur. Any forward-looking statements speak only as of the date they are made. T. Rowe Price assumes no duty to, and does not undertake to, update forward-looking statements.

Future interest expenses. We multiplied each country's debt-to-GDP ratio by the prevailing 10-year government bond yield as a proxy for the effects of future interest expense on the country's debt burden—this assumes all outstanding debt would be renewed at the prevailing market rate and no change to the level of debt. By this metric, the U.S., the UK, and Italy will face a notable drag due to interest expenses.

Time provides a buffer. The low interest environment that prevailed over the last decade paired with the long maturity of debt issued have provided governments time to address their very high public debt ratios. Debt sustainability is not a pressing issue at this moment despite our outlook for debt to continue rising.

As governments refinance maturing debt at higher rates, interest expenses will rise. This will not have an immediate impact, but if nothing changes, higher interest and significant deficits will snowball. This impact would be even more significant if real interest rates increased. In our view, uncertainty regarding future interest rates could contribute to the lack of fiscal prudence as countries do not appear to be in a particular rush to address high fiscal deficits.

Methods to stabilize debt-to-GDP ratios

The two most likely scenarios that governments in developed countries would pursue to address rising public sector debt

are fiscal consolidation and a combination of inflation and financial repression.

Fiscal consolidation. Fiscal consolidation, through lower government spending, higher taxes, or both, could be an option for these vulnerable countries as required adjustments remain modest, but fiscal consolidation is difficult.

What does it take to successfully implement a fiscal adjustment?

- Voters have a clear understanding of why prudent fiscal policies are important.
- A medium-term plan with binding limits and other fiscal rules.

- Specific plans for upside and downside growth surprises.

Inflation and financial repression.

When fiscal consolidation efforts are unsuccessful or unfeasible, governments can also address their domestic debt (debt denominated in local currency) via inflation and financial repression.

How can countries use inflation and repression to address existing debt?

- Elevated inflation levels reduce the future value of current debt, making debt more manageable by allowing inflation to run at higher levels.
- Policies, such as quantitative easing, yield controls, or bank reserves or liquidity requirements that indirectly channel funds to government use, typically at below-market rates, can help governments stabilize debt levels.

Motivation to act

What would spur governments into action? If market pressures were to translate into failed government debt auctions, or if there was an evaporation of liquidity from the secondary markets or if there were rising sovereign credit spreads, then the likelihood that a nation would take steps to stabilize its debts would increase.

In our view, the U.S., the UK, and Japan are likely to continue loose fiscal policies for now, as their debt sustainability risks

are not immediate. France and Italy are the most likely to engage in gradual deficit reductions, influenced by eurozone fiscal rules and monetary policy implemented on a pan-European scale. However, France's newly elected "hung parliament" could make budget decisions more contentious, putting prudent fiscal policy in jeopardy.

Over the medium term, we see a higher probability for inflation spikes and financial repression in the U.S., the UK, and Japan if debt sustainability risks increase.

Investment implications

The sizable debt-to-GDP levels of select developed market countries is a growing concern, but the issue does not need to be addressed immediately. There are also different methods that governments can use to tackle debt sustainability issues.

The method a country employs to address its debt sustainability leads to some likely outcomes and can create unique investment opportunities. Should governments choose fiscal consolidation, a clear implication would be for a fiscal drag on growth for the next several years, creating disinflationary pressure. This would allow for lower rates, which we believe would create opportunities in a country's domestic debt, as these positions could be attractive amid falling yields. Conversely, the country's currency could become less valuable.

“

The method a country employs to address its debt sustainability leads to some likely outcomes and can create unique investment opportunities.

If governments choose financial repression and inflation, elevated and volatile inflation would be a likely reaction. In our view, this process for addressing debt stability would evolve in two stages: In the first stage, elevated inflation would cause longer-term rates to increase. In this case, we would look for opportunities to take advantage of a steepening yield curve. Inflation-linked bonds could also be attractive. In the second stage of this strategy to improve debt sustainability, higher market rates could encourage officials to implement financial repression measures to bring rates down.

T. Rowe Price identifies and actively invests in opportunities to help people thrive in an evolving world, bringing our dynamic perspective and meaningful partnership to clients so they can feel more confident.

Important Information

This material is being furnished for general informational and/or marketing purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice. Prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. **Past performance is not a reliable indicator of future performance.** The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request. It is not intended for distribution to retail investors in any jurisdiction.

DISCLOSURE CONTINUES ON THE FOLLOWING PAGE.

Important Information (cont.)

Australia—Issued by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 28, Governor Phillip Tower, 1 Farrer Place, Sydney NSW 2000, Australia. For Wholesale Clients only.

Brunei—This material can only be delivered to certain specific institutional investors for informational purpose only. Any strategy and/or any products associated with the strategy discussed herein has not been authorised for distribution in Brunei. No distribution of this material to any member of the public in Brunei is permitted.

Canada—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

Colombia, Chile, Mexico, Peru, Uruguay—This material is prepared by T. Rowe Price International Ltd - Warwick Court, 5 Paternoster Square, London, EC4M 7DX which is authorised and regulated by the UK Financial Conduct Authority - and issued and distributed by locally authorized distributors only. For professional investors only.

DIFC—Issued in the Dubai International Financial Centre by T. Rowe Price International Ltd which is regulated by the Dubai Financial Services Authority as a Representative Office. For Professional Clients only.

EEA—Unless indicated otherwise this material is issued and approved by T. Rowe Price (Luxembourg) Management S.à r.l. 35 Boulevard du Prince Henri L-1724 Luxembourg which is authorised and regulated by the Luxembourg Commission de Surveillance du Secteur Financier. For Professional Clients only.

Hong Kong—Issued in Hong Kong by T. Rowe Price Hong Kong Limited, 6/F, Chater House, 8 Connaught Road Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Indonesia—This material is intended to be used only by the designated recipient to whom T. Rowe Price delivered; it is for institutional use only. Under no circumstances should the material, in whole or in part, be copied, redistributed or shared, in any medium, without prior written consent from T. Rowe Price. No distribution of this material to members of the public in any jurisdiction is permitted.

Korea—This material is intended only to Qualified Professional Investors. Not for further distribution.

Mainland China—This material is provided to qualified investors only. No invitation to offer, or offer for, or sale of, the shares will be made in the mainland of the People's Republic of China ("Mainland China", not including the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of the Mainland China. The information relating to the strategy contained in this material has not been submitted to or approved by the China Securities Regulatory Commission or any other relevant governmental authority in the Mainland China. The strategy and/or any product associated with the strategy may only be offered or sold to investors in the Mainland China that are expressly authorized under the laws and regulations of the Mainland China to buy and sell securities denominated in a currency other than the Renminbi (or RMB), which is the official currency of the Mainland China. Potential investors who are resident in the Mainland China are responsible for obtaining the required approvals from all relevant government authorities in the Mainland China, including, but not limited to, the State Administration of Foreign Exchange, before purchasing the shares. This document further does not constitute any securities or investment advice to citizens of the Mainland China, or nationals with permanent residence in the Mainland China, or to any corporation, partnership, or other entity incorporated or established in the Mainland China.

Malaysia—This material can only be delivered to specific institutional investor. This material is solely for institutional use and for informational purposes only. This material does not provide investment advice or an offering to make, or an inducement or attempted inducement of any person to enter into or to offer to enter into, an agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities. Nothing in this material shall be considered a making available of, solicitation to buy, an offering for subscription or purchase or an invitation to subscribe for or purchase any securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of Malaysia.

New Zealand—Issued by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 28, Governor Phillip Tower, 1 Farrer Place, Sydney NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Philippines—ANY STRATEGY AND/ OR ANY SECURITIES ASSOCIATED WITH THE STRATEGY BEING DISCUSSED HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FUTURE OFFER OR SALE OF THE STRATEGY AND/ OR ANY SECURITIES IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE, UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

Singapore—Issued by T. Rowe Price Singapore Private Ltd. (UEN: 201021137E), 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

South Africa—Issued in South Africa by T. Rowe Price International Ltd (TRPIL), Warwick Court, 5 Paternoster Square, London EC4M 7DX, is an authorised financial services provider under the Financial Advisory and Intermediary Services Act, 2002 (Financial Services Provider (FSP) Licence Number 31935), authorised to provide "intermediary services" to South African Investors. TRPIL's Complaint Handling Procedures are available to clients upon request. The Financial Advisory and Intermediary Services Act Ombud in South Africa deals with complaints from clients against FSPs in relation to the specific services rendered by FSPs. The contact details are noted below: Telephone: +27 12 762 5000, Web: www.faisombud.co.za, Email: info@faisombud.co.za

Switzerland—Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland. For Qualified Investors only.

Taiwan—This does not provide investment advice or recommendations. Nothing in this material shall be considered a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person in the Republic of China.

Thailand—This material has not been and will not be filed with or approved by the Securities Exchange Commission of Thailand or any other regulatory authority in Thailand. The material is provided solely to "institutional investors" as defined under relevant Thai laws and regulations. No distribution of this material to any member of the public in Thailand is permitted. Nothing in this material shall be considered a provision of service, or a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person where such provision, offer, solicitation, purchase or sale would be unlawful under relevant Thai laws and regulations.

UK—This material is issued and approved by T. Rowe Price International Ltd, Warwick Court, 5 Paternoster Square, London EC4M 7DX which is authorised and regulated by the UK Financial Conduct Authority. For Professional Clients only.

USA—Issued in the USA by T. Rowe Price Associates, Inc., 100 East Pratt Street, Baltimore, MD, 21202, which is regulated by the U.S. Securities and Exchange Commission. For Institutional Investors only.

© 2024 T. Rowe Price. All Rights Reserved. T. ROWE PRICE, INVEST WITH CONFIDENCE, and the Bighorn Sheep design are, collectively and/or apart, trademarks of T. Rowe Price Group, Inc.