the budget lab

Political Risks to the U.S. Safe Harbor Premium

By Ernie Tedeschi May 2024

Executive Summary

- The US enjoys a safe harbor investment premium—a value that investors place on US safety, soundness and stability.
- Even a relatively modest move in risk premia would have profound implications for the US. If the US country risk premium moved to that of the current UK level, after 10 years, real equity wealth per household would be \$50,000 lower and real GDP 1% smaller.
- The erosion of safe harbor advantages could include more uncertainty and discontinuous risk, higher bond yields, and, ultimately, lower growth.
- Country risk analysis is a relative concept. Since the US is conventionally the benchmark for measuring global risk, by construct, US risk is often assumed to be 0 percent.
- Along several different dimensions, however, US political risk has risen over the last eight years: we estimate a "shadow" risk premium for the US that implies that US political and institutional risk is more consistent with a country risk premium of 25-35 basis points rather than zero. For context, this is roughly half of the UK's premium in the immediate aftermath of Brexit.
- US shadow political risk was broadly falling over 2006- 2016 and has risen since by around 20-25 basis points. Most of this rise occurred from 2016-20.
- There is suggestive evidence that markets are underpricing current US political risk. A gradual pricing in of 25 basis points of shadow risk implies a modestly higher unemployment rate (+0.1 percentage points, or about 200,000 more unemployed workers) and smaller economy (-.25%) after 10 years.
- Furthermore, worsening political risk and a precipitating market event could have much more profound implications. For example, a rapid repricing of another 100 basis points of risk—on par with what S&P felt the 2011 debt ceiling crisis equated to—as well as a pullback in foreign direct investment to the US would raise the unemployment rate by around 0.5 percentage points even after a decade and shrink the economy by more than 1%.

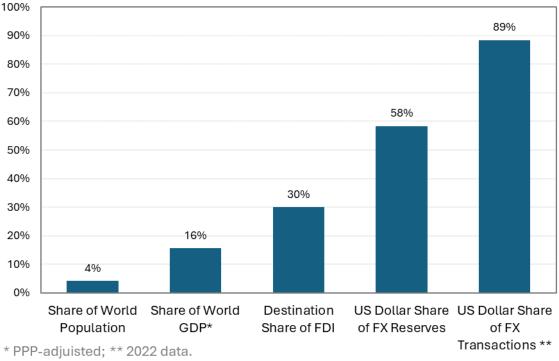
A truly catastrophic scenario is difficult to estimate, but a risk shock of 300 basis points—3x the 2011 experience—would shrink average equity wealth per household by more than \$200,000 in 2023 dollars and lower annual labor earnings by about \$6,000 per worker after a decade.

Background on the Safe Harbor Premium

What is a "safe harbor" premium?

The United States plays an outsized role in the world economy. With approximately 4% of the world's population, the US nevertheless accounted for about 16% of its PPPadjusted GDP in 2023 (see Figure 1). Almost a third of the world's foreign domestic investment flows to the US, by far the largest destination for FDI. Meanwhile US financial assets are the core of global financial markets: almost 60% of central bank foreign exchange reserves are in US dollars, and the US dollar is involved in roughly 90% of all foreign exchange transactions. Dollar demand is driven in part by demand for dollar-denominated financial assets, including U.S. Treasury securities, considered to be among the safest and most liquid assets in the world. More than a third of the marketable Treasury debt held outside the Federal Reserve is held by foreigners.

Figure 1.



Measures of US Global Economic Influence in 2023

Source: IMF, OECD, Atlantic Council, BIS.

A key piece of the story of this US dominance—a piece which both contributes to that dominance and is itself affected by it—is the perceived US "safe harbor" premium. The safe harbor premium can be thought of as the value of the safety, soundness, and stability of the US to investors, relative to other countries. It does not encompass any

single characteristic of the US and, like many other concepts in finance, is difficult to observe and measure. On the other hand, pricing country risk is an important consideration for investors, even in the context of the US. Equity analysts typically measure risks to investors in terms of a "country risk premium" or CRP. The CRP is the additional return demanded by investor for bearing the risk of a country's equity markets *relative to a safer market*.¹ We can illustrate this with a simplification of a standard capital asset pricing model:

Expected Return on Equity Investment = Risk-Free Rate + Global Equity Risk Premium + Country Risk Premium

In words, the return an investor would expect on an equity investment is the sum of the risk-free rate (often assumed for convenience to be the 10-year US Treasury yield), the incremental additional risk to investing in equities anywhere rather than in a safer asset (the global equity risk premium), and the further incremental country-specific risk to investing in their economy (the country risk premium). This is the lens through which we will think about the US safe harbor premium in this analysis. In the US macro modeling section later in the piece, since US models typically do not account for a separate US CRP, we will be shocking the ERP, since it is conceptually in the same space.

What Affects the US Safe Harbor Premium

Many characteristics of the US drive its safe harbor premium. Not all of these advantages are unique to the US on their own, however: Figure 2 below shows that there are other countries with strong credit ratings, for example. Others are large economies like the US, and still others have stable political and legal institutions. The US advantage is the presence of all of these factors simultaneously, including:

• **Credit.** A cornerstone of the US safe harbor premium is its creditworthiness, the value of the US's word in servicing its debts. Even after the 2011 S&P downgrade and the 2023 Fitch downgrade, the US sovereign debt rating remains relatively strong. However, further declines in the US credit rating would threaten the US safe harbor premium almost by definition.

¹ For convenience and clarity, this piece analyzes the safe harbor premium through the lens of *equity* markets and the country risk premium, which is typically defined in terms of *equity* returns. In reality, rising country risk likely affects other financial assets too, such as bonds. Rising country risk may also weigh on real economic outcomes, like consumer spending, through channels outside of financial markets including consumer confidence. One non-equity concept related to a safe harbor premium is the convenience yield foreign investors derive from holding US Treasury securities. <u>Jiang, Krishnamurthy, and Lustig (2018)</u> estimate this convenience yield was 25 basis points pre-pandemic.

- **The dollar.** The US controls the world's premier reserve currency, the most-used medium of exchange on Earth and the currency in which many important global commodities such as oil are priced.
- **Treasury securities.** The public debt securities issued by the US are considered by investors to among the safest, most liquid assets in the global financial system and are key sources of collateral and reserves for many financial institutions.
- **Independent institutions.** The US economy and financial system are underpinned by a credible, politically independent central bank (the Federal Reserve) and a finance ministry staffed by professional civil servants and political appointees with relevant expertise (the Treasury Department).
- **Economic outlook.** The US is the world's largest economy in dollar terms and the world's second largest, to China, in purchasing power parity terms (but with a far larger GDP per capita). The US is a highly productive economy, with a GDP-per-hour-worked at the top of the G7 and among the highest in the entire OECD. The US is also an integrated economy: both a monetary and fiscal union. The labor force is large, relatively educated, and freely mobile within the country. Its future growth trajectory is also more robust than many other advanced economies, in large part thanks to immigration.
- Legal & political stability. The US has a relatively fair and equitable legal system and for more than two centuries has held uninterrupted regular elections. Regulators tend to be independent, and the bureaucracy is usually staffed by professionals. US government data, especially economic data, are transparent, highly credible, and widely respected. The military is overseen by civilians and stays largely uninvolved in direct politics.

Sizing the US Safe Harbor Premium

Figure 2 below shows several measures of global risk as of 2023, including a prominent estimate of the CRP by NYU Stern economist Aswath Damodaran. The US is not the only country with an assumed 0% CRP, but neither are all advanced economies riskless. The CRP is by necessity a relative concept, and the Damodaran work makes the conventional assumption of using the US as the benchmark for measuring the CRP of other countries. The upshot is that the US CRP in Figure 2 and in many country risk analyses is 0% largely by construct, an assumption that makes measuring market perceptions of US political risk challenging. We will revisit that assumption later in this analysis.

Figure 2.

		Percent					Sovereign Bond Ratings				
	Share o	of World	Country Risk	10-year CD	S	S&P	Moody's	Fitch	Simple Average		
	GI	OP	Premium*	Spread**		Gar	intoday s	THOM	(Rescaled 1-10)***		
US		15.4	0.0	0	.58	AA+	Aaa	AA+	9.7		
Canada		1.4	0.0	C	.44	AAA	Aaa	AA+	9.8		
Germany		3.2	0.0	C	.29	AAA	Aaa	AAA	10.0		
France		2.2	0.7	C	.43	AA	Aa2	AA-	8.8		
UK		2.2	0.9	C	.51	AA	Aa3	AA-	8.7		
Japan		3.7	1.0	C	.43	A+	A1	А	7.8		
Italy		1.8	3.2	1	.34	BBB	Baa3	BBB	5.8		
Rest of Eurozone		4.6	1.4								
Rest of OECD		11.0	3.2								
China		18.8	1.0	C	.99	A+	A1	A+	8.0		
Rest of World		35.3	5.3								

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* Damodaran (2023)

** As of December 31, 2023.

*** Simple average of three major ratings harmonized from 20 (AAA/Aaa) to 1 (CC/Ca) and then rescaled out of 10. Source: IMF, Damodaran (2023), S&P, Moody's, Fitch, The Budget Lab analysis.

The relative nature of measuring country risk means that there is no way to size the US safe harbor premium in isolation or in absolute terms. After all, if every nation were equally risky, the US would have no comparative advantage in risk. A more insightful way to think about the US safe harbor premium then is relative to a benchmark foreign country.

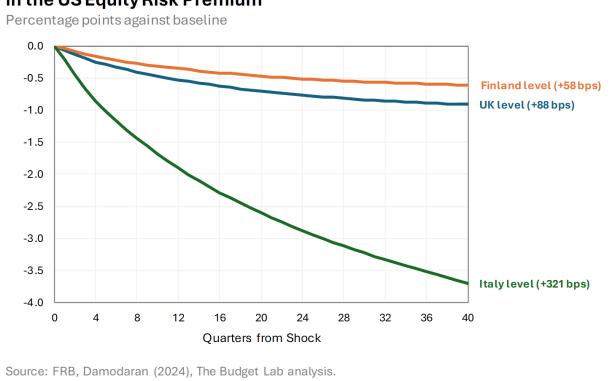
Among rich countries, Damodaran's CRP estimates vary: 0% (the US, Canada, Switzerland, Germany, and Australia among others), 58 basis points (Finland, Austria), 72 basis points (France), 88 basis points (the UK), 234 basis points (Spain), and more than 300 basis points (Italy, Greece). Figure 3 shows the effect over time on the level of US real GDP if the US equity risk premium were to permanently increase by the CRP levels of different advanced economies. We use FRB/US, the Federal Reserve's workhorse macroeconomic model, to quantify these effects. Even small increases in risk have a noticeable effect after a decade. Take, for example, the United Kingdom, a large, advanced economy with a country risk premium of 88 basis points as of January 2024, under Damodaran's estimates.² The UK's CRP has been rising: it was 48 basis points in 2017, the year after Brexit, which shows that for a country not bound to zero, there can be meaningful variation in the CRP over time. If US risk deteriorated even to the current UK 88 basis point level, it would have profound implications for American well-being in the long-run. A higher US country risk premium means the cost of capital for financing business investment rises, and foreigners would demand higher rates of return before investing in the US. The end result is that over time, investment is weaker than

² pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html (Accessed May 1, 2024)

otherwise, the US private capital stock is smaller, the size of the US economy is reduced, and US households are poorer and less wealthy.

The incremental *growth* effects of a higher US CRP (of a size similar to that of the current UK premium) appear small at first glance: over the next decade, annual US real GDP growth would average 0.1 percentage point lower each year if the US equity risk premium were 88 basis points higher. But as these higher risk premia persist, the growth effects accumulate. After 10 years, US real GDP is 1% lower, the equivalent of almost \$2,300 less output per household in 2023 dollars (see Figure 4). The average household spends \$1,470 less per year, and the average worker sees labor earnings that are smaller by \$600. A smaller economy with less business investment means lower value potential from equities: aggregate household stock wealth falls by 17% or \$7 trillion in 2023 dollars.³ That is the equivalent of almost \$50,000 per household.⁴

Figure 3.

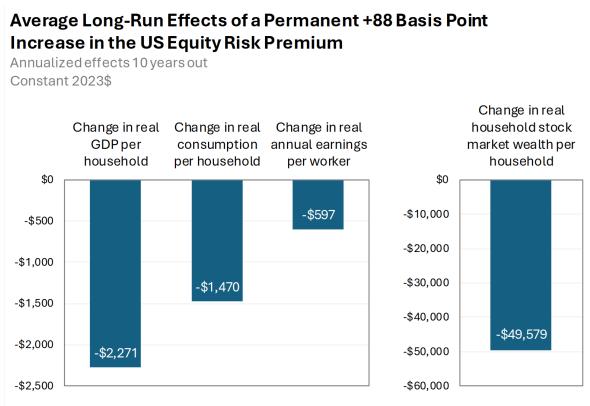


Effect on the Level of Real GDP of a Permanent Increase in the US Equity Risk Premium

³ Because stock market wealth is concentrated in wealthier households, this result does not reflect what the *median* household would experience. Impacts for wealth in particular would be concentrated at the top of the income/wealth distribution.

⁴ See the FRB/US methodology in the appendix.

Figure 4.



Source: Federal Reserve Board, Damodaran (2023), The Budget Lab analysis.

What a Deteriorating Safe Harbor Premium Might Mean for the US

But of course, the US safe harbor premium is not guaranteed, merely something we are all used to. The rest of this analysis focuses on the possible erosion of the US safe harbor premium in the future. This would happen if markets perceived that one or more of the US advantages mentioned earlier were likelier to fail or weaken. Contemplating such outcomes is fraught with uncertainty; as a result, these risks are not always wellmeasured.

The Challenges of Measuring US Risk

One reason these risks are not well-measured is that political and institutional risk analysis often involves confronting "black swan" events that are outside the historical US experience. Take, for example, the financial risk of a severe political event, such as a successful military coup. Investors commonly grapple with this type of risk when considering a project in a developing economy. But it is far more difficult for markets to price such an extraordinary event in the context of the US, where it would be unprecedented at the federal level.⁵

Another reason measuring US risk is difficult is that the US represents a blind spot for conventional risk analysis. Financial markets are used to pricing different types of narrow risk constantly, even for the US. Figure 2 earlier for example showed credit default swap (CDS) spreads for major countries, which can used to estimate default risk. However, broad country risk—incorporating financial, economic, political, and institutional risk—is a relative concept that requires a benchmark. A common convention in both academic and private-sector approaches to country risk analysis is that the US itself acts as that benchmark, or at least as one of them. As mentioned earlier, that is a key assumption of Damodaran's thorough work on the country risk premium, where he assumes by construct that the US and a handful of other traditionally "safe" harbors like Australia and Switzerland have risk premia of 0%.⁶

Relative calculations are a necessary approach for analysts to be able to shed light on country risks, and the US, given its size and importance, is a defensible yardstick. The downside however is that making the US a benchmark means zeroing out its country risk by assumption. Variations in US political and institutional risk are therefore vulnerable to being missed by many investors and risk analysts. Just as human beings are not conscious of the Earth's high velocity traveling through space, so too might global risk analysts fail to anticipate a deterioration in the US safe harbor premium.

A further challenge in estimating the implications of US risk in particular is the unique centrality of the US to global economic and financial flows. Even recent history has no shortage of examples of deterioration of democratic norms and financial soundness. But the risk of such backsliding in the US is an exceptional consideration given how US institutions—the dollar, Treasury securities, the Federal Reserve, etc.—are the backbone of world financial markets. The US is at the center of the global financial system in ways that other countries—even other advanced, rich economies—are not (see Figure 5). These interdependencies mean that US borrowing patterns have had substantial effects on global capital flow cycles.⁷ Like the loose thread of a sweater, erosion of the US safe harbor premium may have fundamental consequences beyond just America that are, literally, unpredictable.

⁵ There are precedents for other serious political shocks in the US, such as political assassinations and armed insurrections including, of course, the American Civil War.

⁶ <u>Damodoran (2023)</u>

⁷ Danzman, Winecoff, & Oatley (2017).



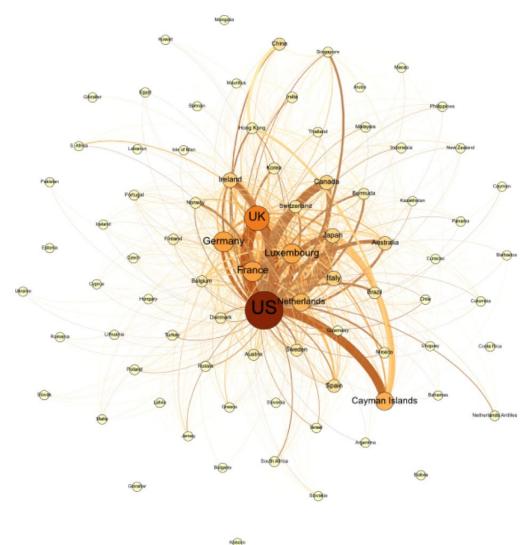


Figure 2. The global financial system in 2012, as measured by the IMF's Coordinated Portfolio Investment Survey. *Note:* The darkness of nodes indicates greater degree centrality, while the thickness of ties among countries indicates the strength of a portfolio financial relationship. The United States is clearly at the core of the global financial system, which is hierarchically organized.

The relationship of democracy and rule of law to the US safe harbor premium

Concerns about the US safe harbor premium overlap with anxieties about the robustness of US democratic institutions and rule of law in the United States – in other words, questions around political risk. This linkage may not be obvious at first: one might imagine for example that in the extreme, an authoritarian regime, unshackled by the need to forge consensus among rival elected factions, could offer more economic, financial, and fiscal stability. The evidence to date however does not bear this out.

Investors need to be clear about what the trade-offs are. Economic research is not conclusive on the question of whether democracies enjoy an *economic growth*

advantage; some individual papers have indeed found a positive growth premium for democracies,⁸ while broader surveys of the literature suggest no consistent advantage either way.⁹ It is also not necessarily the case that a backsliding away from democracy and rule of law affect markets *immediately*—markets may initially be up for a time if the new regime begins by announcing market-friendly policies and markets continue underpricing country risk. Some research however does suggest meaningful differences in market impacts: one IMF study concluded that social unrest events have a negligible effect on equity markets in more democratic countries, while they can lead to sharp and persistent equity losses—the authors found -4% effects over the month following the shock—under more authoritarian regimes.¹⁰

The stronger consensus is that the trade-off between democracy and authoritarianism appears to be one about risk and volatility. Damodaran (2023) draws the distinction between "continuous" and "discontinuous" risk. Democracies are characterized by the *continuous risk* of policy changes as governments and administrations change. By their nature, some amount of unpredictability and volatility is the norm with democracies, but changes tend to be incremental. In contrast, authoritarian regimes can lead to more policy stability for a time, but they heighten *discontinuous* risks: the possibility of catastrophic and difficult-to-manage changes. Risk in a sense becomes itself riskier with less democracy. This heightened risk reflects the wider set possible negative outcomes under authoritarian regimes, through channels such as corruption, capricious legal systems, and nationalization/expropriation risk that can negate the benefits of policy stability. As Harvard economist Dani Rodrick puts it, "[E]conomic life is less of a crap shoot under democracy."¹¹

A related strand of research has focused on the transition to *populist* policies and regimes within democracies. Populist economies have ambiguous growth differentials initially—and in many cases may begin by outperforming their non-populist counterparts financially and economically—but generally begin to underperform after around three years; one study estimated this gap reaches 10% lower GDP per capita after 15 years.¹² This can happen through a variety of channels. For example, populist regimes tend to increase tariffs and cut off immigration.¹³ Social trust could also erode under more populist or authoritarian regimes, which may decrease entrepreneurship¹⁴ and increase

- ⁹ Doucouliagos & Ulubasoglu (2008).
- ¹⁰ <u>Barrett et al (2021)</u>.

- ¹² Funke, Schularick, and Trenesch (2021).
- ¹³ <u>Kleinfeld (2023).</u>
- ¹⁴ <u>Corradini (2022).</u>

⁸ <u>Acemoglu et al (2019).</u>

¹¹ <u>Rodrik (1997).</u>

crime¹⁵ and corruption.¹⁶ Some have also observed that a backslide in democratic norms leads to less transparency,¹⁷ which can lead to lower foreign direct investment in certain sectors.¹⁸ The composition of a weaker economy in the US context would depend crucially on the specific drivers of that weakness, but to put the magnitudes in perspective: a 10% fall in the level of US GDP per capita 15 years from now comes to roughly \$27,000 in lost output per household in 2023 dollars.¹⁹ Such weakness would be the equivalent of about a six percentage point increase in the equity risk premium.²⁰

All of this speaks directly to country risk and the safe harbor premium. A US with more discontinuous risk is one where investors both domestic and global likely demand a higher rate of return—a higher risk premium—to offset the possibilities of negative political, institutional, and economic outcomes. Depending on the nature of the perceived risks, ratings agencies may also incorporate these concerns into lower credit rating. Indeed there appears to be a "democratic advantage" in debt issuance terms, driven by better credit access and by better ratings from democracies relative to more authoritarian governments—one study found that for a country without recent default, the advantage of being a democracy was equivalent to moving to a Aa2 from a Baa3 rating on the Moody's scale.²¹ As an example, in their August 2023 downgrade of US sovereign debt, Fitch Ratings emphasized not economic risks but the "steady deterioration in standards of [US] governance over the last 20 years."²²

The experience of the 2011 US debt ceiling crisis

The most salient recent example of the economic consequences of US political risk is the 2011 debt ceiling crisis. Since 1917, in addition to passing an annual budget, Congress has set a statutory debt limit that, once hit, must be legislatively raised or suspended before Treasury can issue net new debt. For most of the 20th century, Congress raised the debt limit as a matter of course, but in recent decades, fights over raising the US debt limit have become more politically contentious. The US reached its statutory debt limit in May 2011; the Department of the Treasury then began using extraordinary measures to temporarily fund ongoing federal obligations. Treasury estimated publicly at the time that these extraordinary measures would be exhausted around August 2, at which point either the debt limit would need to be raised or suspended, or the US would begin

²¹ Beaulieu, Cox, & Saiegh (2012).

²² Fitch Ratings (2023).

¹⁵ <u>Wike (2008).</u>

¹⁶ <u>Rothstein (2011).</u>

¹⁷ <u>Mosley (2023).</u>

¹⁸ Hollyer, Rosendorff, & Vreeland (2013).

¹⁹ Based on a simple FRB/US simulation using the April 2024 baseline.

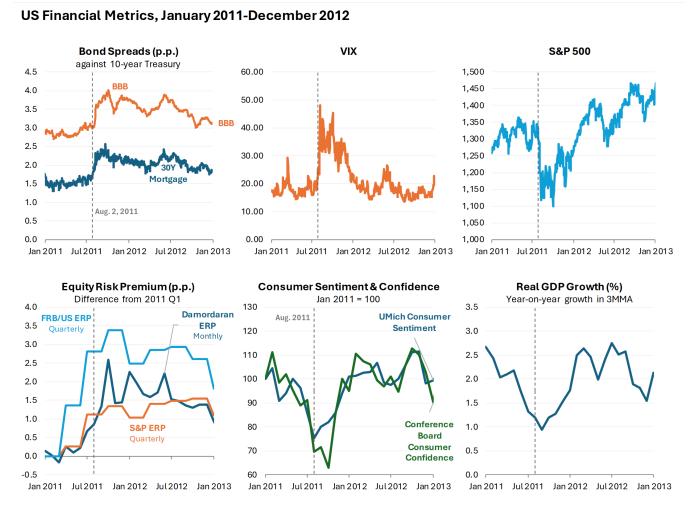
²⁰ In reality, <u>Funke, Schularick, and Trenesch (2021)</u> find that there are multiple potential drivers of weaker economic performance in populist regimes, not just higher risk premia. Our six percentage point calculation is a translation of a smaller point-in-time US economy into equity risk premium space.

defaulting on some of its obligations.²³ Negotiations between President Obama and Congress lasted throughout the summer. Finally, on July 31, Obama and then-House Speaker John Boehner announced a bipartisan deal to raise the debt limit and lower the deficit that would become the Budget Control Act of 2011. The bill passed both houses of Congress and was signed by President Obama on August 2, the very day of Treasury's deadline, avoiding default. Despite the short-term resolution, on August 5, S&P downgraded the US credit rating to AA+ with a negative long-term outlook.

Figure 6 shows different US financial and economic metrics at the time. One immediate observation is that markets largely had not priced in the risk of a default or a downgrade in the run up to the deadline: on eve of early August, equities were still up year-to-date, and both the VIX and BBB corporate spreads—measures of volatility and risk—were roughly around their levels at the beginning of the year. This is despite the fact that both consumer sentiment and confidence had deteriorated by around 10% between January and July, and activity growth as proxied by monthly real GDP growth had cooled from around 2 ½% year-on-year in January to just over 1% in July. Retrospective estimates of the equity risk premium—from Damodaran, S&P, and the Federal Reserve's FRB/US model—suggest that even by 2011 Q2, the ERP had already risen by between 25-140 basis points.

²³ Here we use "default" in the broad sense to mean any missed payments, including interest payments to creditors, mandatory spending such as Social Security, or federal wages & salaries. Treasury has never publicly outlined a framework for how to manage or prioritize different ongoing payments in the event of the debt ceiling breach.

Figure 6.



Source: FRB, S&P Global, Damordaran (2023), UMich, Conference Board, Haver, The Budget Lab analysis.

In the wake of the S&P downgrade and <u>further market anxiety in Europe around peripheral</u>

Eurozone countries, markets reacted swiftly. BBB spreads jumped 50 basis points in a week and another roughly-50 basis points over the subsequent two months. The S&P 500 closed 7% lower the following Monday after the downgrade, and the VIX doubled from the week prior. Estimates of the equity risk premium also shot up: Damodaran estimates that between July and October it rose an additional almost-2 percentage points on top of its year-to-date rise through July. Quarterly S&P estimates of the ERP topped out more than 1 percentage point higher in 2011 Q4 than in 2011 Q2.

Moreover, these effects were persistent, even though the immediate crisis had been resolved and there had been no default. The S&P 500 and VIX did not recover to pre-August 2011 levels until early 2012. BBB corporate spreads did not fully recover to early 2011 levels until late 2013; in the interim, corporate borrowing costs were around 50 basis

points higher on average. It would not be until January 2014 that Damodaran's ERP estimates returned back to their 2011 Q1 levels; to date, the S&P 500 ERP estimate has *never* returned back to 2011 Q1 levels.

What is important to remember is that the deterioration of market conditions and the downgrade of US credit in August 2011 was not simply a mechanical function of the possibility of missed interest payments to creditors. The first interest payment due after the August 2 deadline was \$29 billion on August 15, almost two weeks after the deadline, coming to just over 10% of the total net interest due that fiscal year. Few Treasury holders expected, in their modal outlook, that the federal government would actually miss or haircut an interest payment. And after all, most of the market reaction followed the S&P downgrade, after a final political resolution had been reached. Instead, the market reaction represented a sudden repricing of US political risk that had existed for some time but gone unnoticed, untested, or ignored. The consequences far outstripped the size of the immediate interest payments being debated: against the \$29 billion in interest due on August 15, the market capitalization for the S&P 500 fell by \$1.7 trillion between 2011 Q2 and Q3; and again, most of this decline occurred after the debt ceiling impasse itself was resolved.

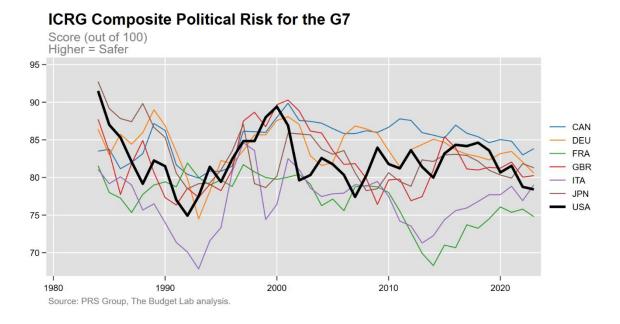
Estimating US Risk

Recent measures of US political and institutional risk

The conventional approach to country risk analysis—using the US as a benchmark creates a blind spot for investors. As the 2011 crisis illustrates, this blind spot is a potentially serious oversight for markets, even in cases where underlying institutional and political tensions are ultimately resolved.

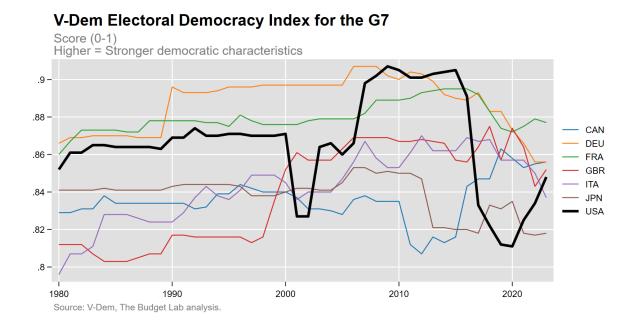
What makes this concerning is that many risk analysts have observed continued recent declines in US stability. PRS Group, a private firm specializing in global risk, rates every country according to a variety of political, economic, and financial criteria, including government stability, law and order, accountability, and corruption. Their composite index of political metrics has been broadly falling for the US since 2018, as the US has gone from the second highest in the G7 (safest, after Canada) to now the second lowest (riskiest, after France) (see Figure 7).

Figure 7.



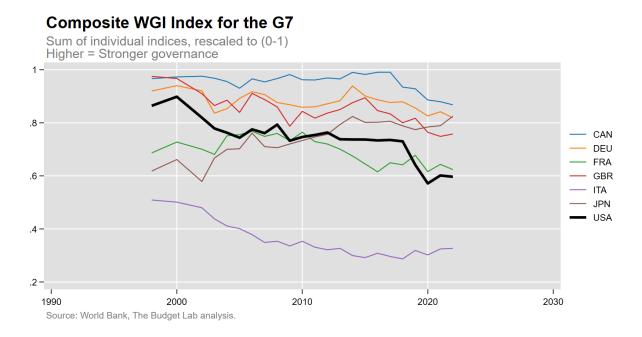
Varieties of Democracy (V-Dem), a global research project that scores democratic and institutional strength based on a network of almost 4,000 country experts, sees a qualitatively similar deterioration in US democratic institutions. The US under the V-Dem electoral democracy measure went from the strongest in the G7 as recently as 2015 to the weakest as of 2020. Since then, V-Dem shows the US has made some relative recovery in the G7 and now ranks higher than Japan and Italy (see Figure 8).

Figure 8.



The World Bank Worldwide Governance Indicators (WGI) are aggregations of risk ratings from over 30 organizations (including PRS Group and V-Dem) along six criteria like accountability, political stability, and rule of law. Figure 9 below is a simple average of these six WGI indices for countries in the G7, rescaled to a 0-1 scale. Our composite WGI shows a similar decline in US governance over the long-run but especially since 2018, with the US now the second lowest rating in the G7 to Italy.

Figure 9.



Combining risk measures to estimate a "shadow risk premium" for the US

As we have mentioned, many prominent country risk analyses assume by design that US country risk is 0%. This is inconsistent with the conclusions of the political and risk experts mentioned earlier, who broadly conclude that US institutional risk is rising both in absolute and relative terms. We seek to map these assessments of rising US political risk into country risk premium space, thereby overcoming the limitations of the zero-US assumption. In broad terms, we create composite estimates of political, financial, and economic risk across time and countries from these organizations and estimate their relationship to the country. This relationship then allows us to synthesize a "shadow" risk premium for the US—that is, a measure of unpriced risk in the US. This shadow risk premium is not static at 0 and reflects the risks reflected in the other measures. More details on the methodology are in the appendix, but we follow a four-step process:

• We gather four sources of widely-follows indices of global risk—V-Dem, WGI, ICRG, and IMF financial risk indices—and use these measures to create a strongly-balanced panel data set of 108 countries over 2002-2023.

- We extract two principal components from these data: one from the data measuring political and institutional risk and one from the data measuring economic and financial risk. Principal component analysis is a way of summarizing the common variation among many different metrics. Its key advantage here is that it allows us not to rely on any single source's potentially idiosyncratic assessment of country risk, but rather on the commonalities between many sources.
- With these composite political and economic risk measures in hand, we estimate their relationship with the Damodaran estimates of the country risk premium (CRP) over 2017-23.²⁴ Damodaran holds the US CRP to 0 by construct, but this analysis allows us to exploit global variation to overcome this assumption.
- The CRP is still best thought of as a relative measure, so we express this estimated US shadow CRP relative to two benchmarks: Canada's shadow CRP alone, and the GDP-weighted shadow CRP of the other 10 countries Damodaran assumes have zero risk by construct (including Switzerland, Germany, and Australia).

Results

Our shadow risk premium suggests that:

1) Political and institutional risks in the US as assessed by a variety of experts are currently more consistent with a country risk premium of around 25-35 basis points (relative to riskless benchmarks) rather than 0 (see Figure 10).

2) The US shadow risk premium was broadly falling against Canada and other riskless countries from 2006-2016.

3) The US shadow risk premium troughed in 2016 at between 5-15 basis points and has risen by 20-25 basis points since then. The bulk of that rise occurred through 2020 (see Figure 10).

²⁴ Unlike a term premium, Damodaran assumes that a country risk premium in isolation cannot be negative. Therefore, we estimate the relationship between the CRP and our risk composites econometrically using a Poisson regression, which is designed for strictly non-negative count outcomes like these.

Figure 10.

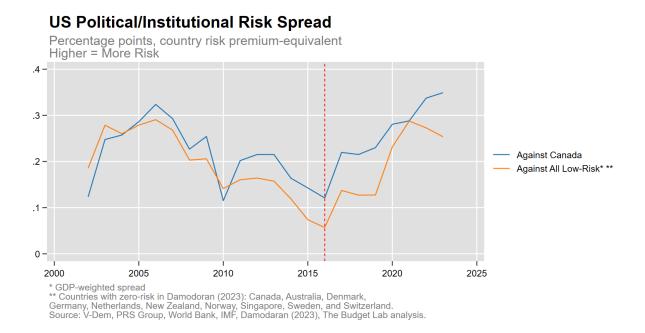
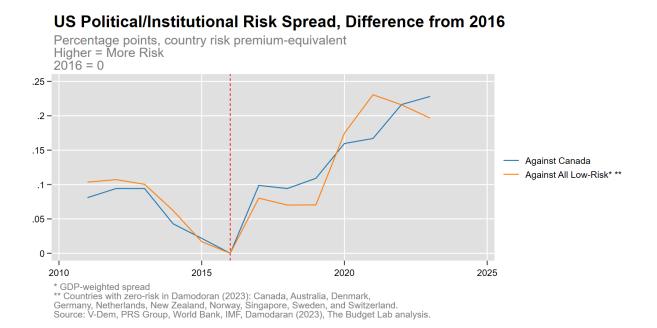


Figure 11.



The current 25-35 basis points of shadow risk premium needs further context. Currently, the countries with the lowest non-zero risk premia under Damodaran's estimates are Austria and Finland, each with country risk premia of 58 basis points. The lowest non-

zero premium in the G7 is France at 72 basis points²⁵. This implies that our US shadow risk premium represents about half of the additional country risk currently posed by France, Austria, and Finland over countries like Australia, Canada, and Germany. Another way to put our shadow risk estimate in context is to note that the UK's country risk premium in 2017—just after Brexit—was 48 basis points, so US risk stands at between half to three-quarters of where UK risk stood in the wake of the Brexit vote to leave the EU. The implication is that unpriced US political risk is not of the magnitude of, say, a developing economy, but it is not riskless either. As we will see momentarily, even these seemingly small risk estimates have material implications for the US economic outlook.

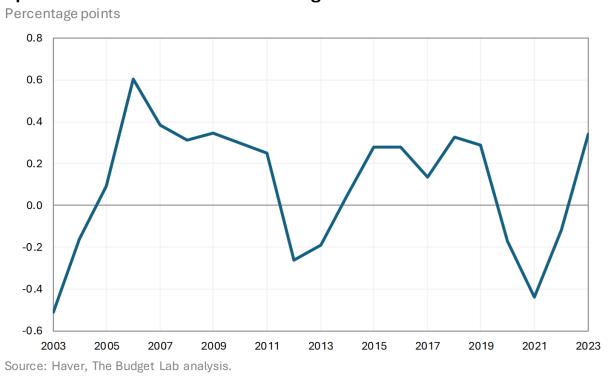
Is Shadow Political Risk Not a Shadow at All?

The shadow risk premium represents a translation of political risks into market rate space. A key question is whether markets have, in actuality, already incorporated estimates of greater US political risk into pricing. We see little evidence of this.

Take for example the spread between inflation-adjusted US and Canadian long-term bond yields (see Figure 11). This spread might reflect, in part, different political risks between the two countries. However, the spread in 2023 was only 7 basis points higher than in 2016. Moreover, real rate differentials could also reflect many other factors, such as differences in growth and productivity outlooks, as well as differences in fiscal outlook. The US grew by 3.1% over 2023 Q4-Q4, three times as much as Canada which grew 1.0% over the same period. The US also broadly has a higher level of public debt, relative to its economy, than Canada does. In fact, the direction of the spread moved in the opposite direction one would expect from 2016-2020 when the bulk of the increase in the political risk in the United States occurred. All of these factors would stack on top of greater relative US political risk and so lean toward expecting a wider, not narrower, real bond yield spread.

²⁵ As of January 2024.

Figure 12.



Spread between Canada and US Long-Term Real Government Bond Yields

This aligns with survey evidence of institutional investors too. A recent States United survey of 22 institutional investors, representing more than \$10 trillion in assets under management, found that more than 90% thought US political risk was rising, but fewer than 1/3 were confident that public companies were well-prepared to handle that rising risk, and 40% said they do not take US political risk into account at all when deciding about US investments.²⁶

While not definitive, this is circumstantial evidence that markets are not pricing in the increased US political and institutional risk perceived by experts. There are three possible resolutions to this disconnect. One is that markets expect any factors that contributed to the political and institutional risk to be temporary, leading to a politically safer trajectory in the short-to-medium run, in which case the unpriced risk would largely dissipate. A second is that riskier outcomes are to come, which could lead to an immediate market correction. The third option seems the likeliest in light of the research already reviewed around markets and increases in authoritarianism and/or populism: a

²⁶ New Survey: Institutional Investors Believe American Democracy Is Increasingly At Risk -(statesuniteddemocracy.org)

riskier outcome does not lead to an immediate market repricing, and for a time, markets misinterpret discontinuous risk with normal levels of continuous risk. However, in that scenario, an unforeseen precipitating event could quickly force a painful reckoning in markets.

Macroeconomic Effects of Higher Political Risk for the US Economy

How quickly shadow risk is priced in, and whether it deteriorates further, are substantial considerations with the US economy. To model this, we develop four illustrative scenarios that vary by the speed and magnitude of risk repricing in equities, and we once again use the Federal Reserve's FRB/US macro model to estimate the implications for the US in the long-run.

We emphasize that these are (quite literally) exercises in uncertainty, and so the reader should interpret the outcomes as tools for thinking about how to map different risk perceptions onto the real economy rather than as forecasts or predictions in their own right. We also note that our modeling is focused solely on the macroeconomic effects of higher risk premia and falls in foreign domestic investment. The types of serious events driving these risk assessments would likely affect the economy in other ways as well, such as declines in consumer spending. Our modeling should therefore not be interpreted as incorporating all of the different economic channels these specific outcomes represent.

The four illustrative scenarios are as follows:

- Scenario 1: Relatively benign repricing. US political risk stops rising and stays at current levels. Markets gradually price in the current 25 basis point of shadow US equity risk over the next four years.
- Scenario 2: Risk rises but the US avoids a precipitating event. US political risk rises by another 25 basis points over the next four years, but a lack of a major forcing event means that markets only gradually price in the 50 additional basis points of risk.
- Scenario 3: Serious Event with Sudden Repricing and Hit to FDI. A political or economic shock causes an immediate (in the model, same-quarter) pricing-in of shadow political risk in quarter 0, with additional magnitude beyond Scenario 2. We calibrate the total risk premium shock in this scenario to 100 basis points, roughly the magnitude of the 2011 rise in the ERP during the ultimately resolved debt ceiling crisis. We also assume a 10% decline in foreign direct investment in the US commensurate with the literature around erosion of democratic institutions.

• Scenario 4: Catastrophic Risk Event. This scenario is even more uncertain than the others but is meant to capture purely the risk premium channel of a "black swan" event outside of realm of US experience, such as a debt default or a military intervention in domestic politics. Here we assume an immediate 300 basis point rise in risk premia and a 30% decline in FDI, but even these assumptions may still undershoot the potential damage of such a scenario.

Table 1 illustrates the results of these simulations. The first two scenarios show that gradual risk repricing only has a modest effect on the US economy. We estimate that an extra 25 basis points of shadow risk implies around a 10-basis-point-higher unemployment rate and real GDP about 0.2% lower after 10 years (Scenario 1). Even this small adjustment to the risk premium causes equity wealth to be about \$15,000 lower per household on average in 2023 dollars. With twice the amount of gradual risk assumed, the effects are twice as large but still not catastrophic, implying annual real growth that is about 5 basis points lower over the next decade (Scenario 2).

Unsurprisingly, a sharper repricing and retraction of foreign direct investment has far more serious implications. A 2011-type repricing implies an unemployment rate that is almost half a percentage point higher *in the long-run*, with employment lower by nearly 1 million (Scenario 3). The US economy is 1.25% smaller after 10 years, about \$3,000 per household over average in 2023 dollars. Since the repricing happens rapidly in this scenario, more than all of the persistent equity losses have occurred by the end of year 1, with a nearly-\$60,000 decline in average per household stock wealth. These effects only compound under the catastrophic outcome: the economy is smaller by almost 1% after just four quarters and by 3.5% over 10 years, around \$23,000 per household on average. Average equity wealth falls by more than \$200,000 within a year. In the longer run, the unemployment rate rises by more than a point and there are nearly 9 million fewer employed workers. Annual wages are about \$6,000 smaller in 2023 dollars.

There are important reasons to think these simulations may underestimate effects too, especially the final two. If, as seems likely, there were ancillary economic effects from a serious risk event not fully captured by our shocks to the equity risk premium in FRB/US—such as a consumer confidence-driven decline in spending—the macroeconomic damage could be significantly larger.

Our Scenario 4 may also severely understate the implications of extraordinary events. Table 2 below shows the cumulative changes in the S&P equity risk premium for the US following selected major events over the past 40 years. Our 300-basis point assumption for Scenario 4 would put the initial shock on par with the GFC rise in the ERP, albeit priced in over a much shorter time and far more persistent than the GFC experience. It is uncertain how different political risk events would compare to the GFC; a US default or a military intervention in politics, for example, might exceed a 300 basis points rise in the ERP.

Table 1.

FRB/US Simulations of Shocks to Equity Risk Premium and FDI in US

Average effects

-		-		-		-	
Scenario 1 Gradual +25bps		Scenario 2 Gradual +50bps		Scenario 3 Sudden +100bps & FDI		Scenario 4 Sudden +300bps & FDI	
Year 1 Impact	Year 10 Impact	Year 1 Impact	Year 10 Impact	Year 1 Impact	Year 10 Impact	Year 1 Impact	Year 10 Impact
+0.0	+0.1	+0.0	+0.2	+0.1	+0.5	+0.3	+1.3
0.0	-0.2	0.0	-0.5	-0.3	-1.2	-0.8	-3.5
-\$2,299	-\$14,723	-\$4,640	-\$28,771	-\$59,740	-\$53,961	-\$248,477	-\$226,229
*	-\$584	*	-\$1,156	-\$664	-\$2,933	-\$4,837	-\$23,271
*	-\$382	*	-\$754	-\$740	-\$1,835	-\$3,459	-\$11,065
*	-\$134	*	-\$267	-\$78	-\$835	-\$514	-\$5,904
*	-253	*	-499	-239	-991	-1,761	-8,817
	Gradua Year 1 Impact +0.0 0.0 -\$2,299 * * *	Year 1 Year 10 Impact Impact +0.0 +0.1 0.0 -0.2 -\$2,299 -\$14,723 * -\$584 * -\$382 * -\$134	Gradual +25bps Gradual Year 1 Year 10 Year 1 Impact Impact Impact +0.0 +0.1 +0.0 0.0 -0.2 0.0 -\$2,299 -\$14,723 -\$4,640 * -\$584 * * -\$382 * * -\$134 *	Gradual +25bps Gradual +50bps Year 1 Year 10 Year 1 Year 10 Impact Impact Impact Impact +0.0 +0.1 +0.0 +0.2 0.0 -0.2 0.0 -0.5 -\$2,299 -\$14,723 -\$4,640 -\$28,771 * -\$584 * -\$1,156 * -\$382 * -\$754 * -\$134 * -\$267	Gradual +25bps Gradual +50bps Sudden +10 Year 1 Year 10 Year 1 Year 10 Year 1 Impact Impact Impact Impact Impact Impact +0.0 +0.1 +0.0 +0.2 +0.1 10 -0.5 -0.3 -\$2,299 -\$14,723 -\$4,640 -\$28,771 -\$59,740 -\$664 * -\$584 * -\$1,156 -\$664 * -\$382 * -\$754 -\$740 * -\$134 * -\$267 -\$78	Gradual +25bps Gradual +50bps Sudden +100bps & FDI Year 1 Year 10 Year 1 Year 10 Impact Impact Impact Impact Impact +0.0 +0.1 +0.0 +0.2 +0.1 +0.5 0.0 -0.2 0.0 -0.5 -0.3 -1.2 -\$2,299 -\$14,723 -\$4,640 -\$28,771 -\$59,740 -\$53,961 * -\$584 * -\$1,156 -\$664 -\$2,933 * -\$382 * -\$754 -\$740 -\$1,835 * -\$134 * -\$267 -\$78 -\$835	Gradual +25bps Gradual +50bps Sudden +100bps & FDI Sudden +30 Year 1 Year 10 Year 1 Impact Impact Impact Impact Impact Impact Impact Impact Impact 1mot +0.3 +0.3 +0.3 +0.3 +0.3 -0.3 -1.2 -0.8 -0.8 -0.3 -1.2 -0.8 -0.8 -0.4 -\$53,961 -\$248,477 -\$248,477 -\$559,740 -\$53,961 -\$248,477 -\$4,640 -\$28,771 -\$664 -\$2,933 -\$4,837 * -\$382 * -\$754 -\$740 -\$1,835 -\$3,459 * -\$134 * -\$267 -\$78 -\$835 -\$514

* = de minimus

Source: FRB, The Budget Lab analysis.

Table 2.

Historical Increases in S&P US Equity Risk Premium

Period	Event	Increase	(p.p.)
2007 Q2-2009 Q1	Financial Crisis/Great Recession		2.93
2011 Q1-Q4	Debt Ceiling Crisis		1.34
2020 Q1	COVID-19		1.03
1987 Q3-1988 Q1	1987 Stock Market Crash		0.80
2001 Q3	9/11 Attacks		0.24

Source: S&P, The Budget Lab analysis.

Conclusion

Our analysis shows the political risk has been rising in the U.S. over the last eight years and is likely not being priced in by markets. While country risk in the US is typically assumed to be zero by construct, we estimate a shadow country risk premium for the US and show that political and institutional risk here is more consistent with 25-35 basis points of country risk premium, roughly half to three-quarters of where the UK stood in the wake of Brexit. Most of this current shadow US risk represents a rise since troughing in 2016. Even this modest current estimate has profound implications. If US political risk stopped growing beyond 25-35 basis points and were gradually priced in by markets, it would still have a meaningful effect on economic outcomes, with equity wealth falling by an average of \$15,000 per household in 2023 dollars after 10 years. In contrast, a catastrophic repricing of risk—in our calibration, an event about three times the magnitude of the 2011 debt ceiling crisis—implies more than \$200,000 lower perhousehold equity wealth after a decade, 3.5% lower real GDP, and 9 million fewer jobs.

Addendum: The Persistent Economic Effects of a Temporary Risk Shock

This analysis broadly focuses on *persistent* increases in US risk premia and how they would affect the economy in the short- and long-run. A related question is how enduring the economic damage would be if a spike in US risk premia were only temporary.

A higher equity risk premium damages the US by reducing domestic and foreign investment over time, lowering incomes and economic capacity. Even if, after spiking, risk premia fell back to more normal levels after a time, the capital stock would be lower than otherwise at first. Good monetary and fiscal policy could in principle help heal much of this damage, but the process would take some time even under attentive policymakers. And US capacity could remain meaningfully lower well after the risk shock dissipated.

To illustrate this, we modify our Scenario 3 (a +100 basis point shock to the equity risk premium and 10% decline in foreign direct investment) so that it lasts four years rather than being persistent. After four years, the equity risk premium renormalizes and foreign direct investment recovers. Through out the entire period, the Federal Reserve sets appropriate monetary policy based on incoming data about inflation and the output gap.

Figure 13 shows the level of real GDP against baseline as a summary statistic. By the end of the shock 16 quarters in, real GDP is 1% lower. As risk renormalizes, domestic and private investment recover and begin to fill in the hole in capacity. The Federal Reserve also has room to lower rates to help augment this process, since this particular shock is not large enough where the zero lower bound binds. However, even 10 years after the end of the risk shock, real GDP is still lower by roughly 0.1%. This result highlights a key problem with risk premia: even if they only rise temporarily, their damage can be deep and long-lasting, with meaningful scarring even a decade later.

Figure 13.

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Source: FRB, The Budget Lab analysis.

Quarters from Shock

Effect on the Level of Real GDP of a Temporary +100 Basis Point Increase in the US Equity Risk Premium and 10% Decline in FDI Percentage points against baseline

Appendix

FRB/US Modeling

The macroeconomic modeling done throughout this analysis uses the Federal Reserve Board's public version of FRB/US, a large, open-source general equilibrium model of the US economy. We use the baseline FRB/US data published as of April 2024. Simulations done with FRB/US by The Budget Lab reflect our shock assumptions and are not official Board forecasts.

Consistently across simulations, The Budget Lab made the following model assumptions:

- Financial and asset markets have rational expectations (i.e. perfect foresight into future model outcomes for determining present behavior), while other agents in the model have adaptive expectations (i.e. they form expectations purely based on backwards-looking data) [MCAP];
- 2. The Federal Reserve reacts immediately to any shock based on an empirically estimated Taylor-type rule based on lags of the fed funds rate, the output gap, and core PCE inflation [RFFALT];
- 3. Fiscal policy is exogenous [DFPEX]; and,
- 4. R* is dynamic immediately, adjusting each quarter by 5% of the lagged gap between actual R and R* [DRSTAR=1].

For simulations involving the US equity risk premium, we shocked the REQP variable, using mcontrol. For Scenarios 3 and 4 which also involved a decline in foreign direct investment (FDI) in the US, we simulated this as a decline in the accumulation of the private capital stock of business fixed investment (KBFI). We assumed that FDI in future would be a constant 8.5% of domestic investment (EBFI), and then scaled down growth in the FRB/US capital stock measure accordingly.

US Shadow Risk Premium

Estimates of the US shadow risk premium were based on a Poisson regression of principal components of various risk data on Damodaran's annual estimates of country risk premia over 2017-2023.

The principal components were estimated from a balanced panel data set of 108 countries over 2002-2023. The PCA was calculated from measures from four sources:

1. **International Country Risk Guide (ICRG), 16 subindices.** PRS Group, a private geopolitical risk analysis firm, produces an array of indices measuring different facets of political, economic, and financial risk for most countries. These indices incorporate both economic data and expert judgements, and capture factors like government stability, military involvement in politics, and currency stability.

2. **Varieties of Democracy (V-Dem), 17 subindices.** Varieties of Democracy (V-Dem) is a research project headquartered at the University of Gothenburg, Sweden, and aimed at understanding democracies by measuring different aspects of democratization over time, including liberal, deliberative, and egalitarian principles. V-Dem relies on a network of almost 4,000 country experts—primarily academics and professionals—to score these characteristics, each of which V-Dem tracks in separate indices, similar to the ICRG series. V-Dem puts more emphasis on political and institutional characteristics and less emphasis on economic characteristics than the ICRG data. V-Dem's database is comprehensive, spanning 600 annual indicators from 1789 to the present for most countries, available to the public free of charge. The Budget Lab uses the set of 17 medium-detail composites that represent aggregates of the full suite of detailed V-Dem indices.

3. World Governance Indicators (WGI), 6 subindices. The World Governance Indicators (WGI) from the World Bank measure six different aspects of political and institutional effectiveness, going back to the late-1990s. The WGI indices represent composites of data and assessments from different private, public, and nonprofit/academic sources.

4. Financial Development Indices, 6 subindices. The Financial Development Indices from the International Monetary Fund (IMF) measure the development of different countries' financial markets and institutions along dimensions of depth, access, and efficiency.

Two separate PCAs were performed: one on the above indices measuring political and/or institutional risk (all of the V-Dem and WGI metrics, roughly half of the ICRG metrics), and one on the indices measuring economic or financial risk (the other half of the ICRG measures and the FDI measures). We used the first principal component from each group of data. These two components served as the explanatory variables in our Poisson regression, with Damordaran's CRPs as the dependent variable. We excluded the US from this regression so that its zero-by-assumption CRP would not weigh on the estimates.