

Angeles



The Battle of White Mountain, Peter Snayers, 1630s, Louvre Museum.

Kipper und Wipper

When the priest Martin Luther nailed his 95 theses to the door of All Saints Church in Wittenberg on Halloween Day 1517, protesting the Church's sale of indulgences, he set off more than a religious revolution. One hundred years later, this minor religious protest engulfed the continent in the most destructive war in European history.

It began in 1618 with the Defenestration of Prague, when Protestant nobles tossed imperial Hapsburg officials from their castle windows, rejecting the rule of the Catholic emperor Ferdinand, and electing their own king. Ferdinand sent his forces to reclaim his control over the rebel territory of Bohemia, and at White Mountain, just west of Prague, crushed the rebellion in a decisive victory. His troubles did not end there, though, as he faced other potential Protestant rebellions throughout his empire, and lacked the resources to keep the empire together. He needed a financial and administrative genius if his empire were to survive.

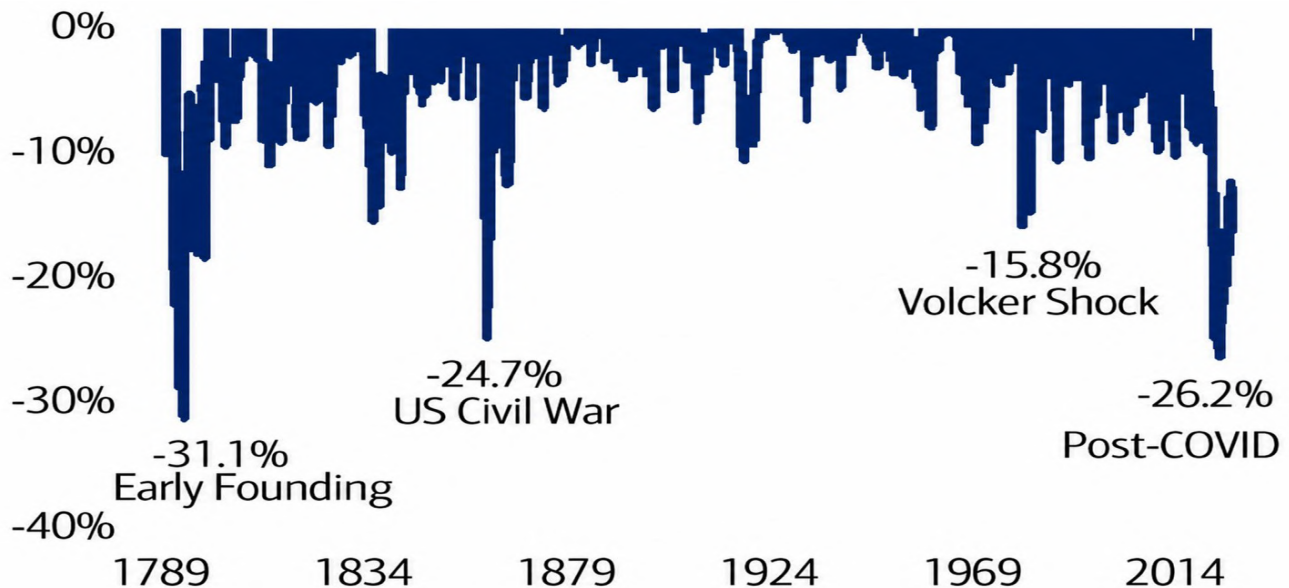
Albrecht Wallenstein was born to a poor, but noble, Protestant family in Bohemia. He studied extensively throughout the empire, becoming fluent in several languages, and fought in wars against the Ottoman Turks. He married a wealthy widow and converted to Catholicism, both of which smoothed his ascent in the Hapsburg court. He led an army at the Battle of White Mountain, was promoted to general, and was the right man in the right place when the Emperor Ferdinand most needed help defending his realm.

Wallenstein's scheme to find the necessary funds for the empire's defense was enormously successful. His military, financial and administrative genius saved the Hapsburg empire from collapse. His genius also sowed the seeds for eventual disaster, both for him and for Ferdinand, offering a warning for us today.

As equity markets reach new highs, bond markets are in the midst of an historic rout: worse than the inflation shock of the 1970s, worse even than the sell-off during the Civil War (Chart 1). This past decade was the worst ten-year period for bond investors in US history (Chart 2).

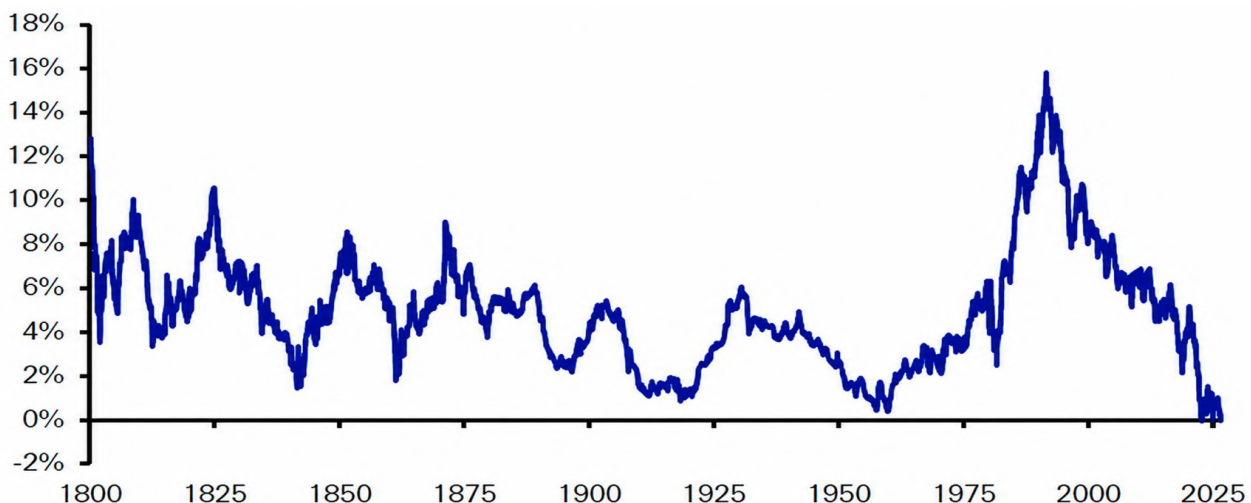
The culprit, as is always the case with bonds, is inflation. Sadly, for bond investors, this inflation is not temporary or transitory, but structural. The forty-year (1980-2020) golden era of plentiful and cheap credit is over, not to return.

Chart 1 Treasury Bond Drawdowns, 1789-2026



Source: BofA

Chart 2 Rolling Ten-Year Annualized Returns Treasury Bonds, 1800–2026



Source: Deutsche Bank

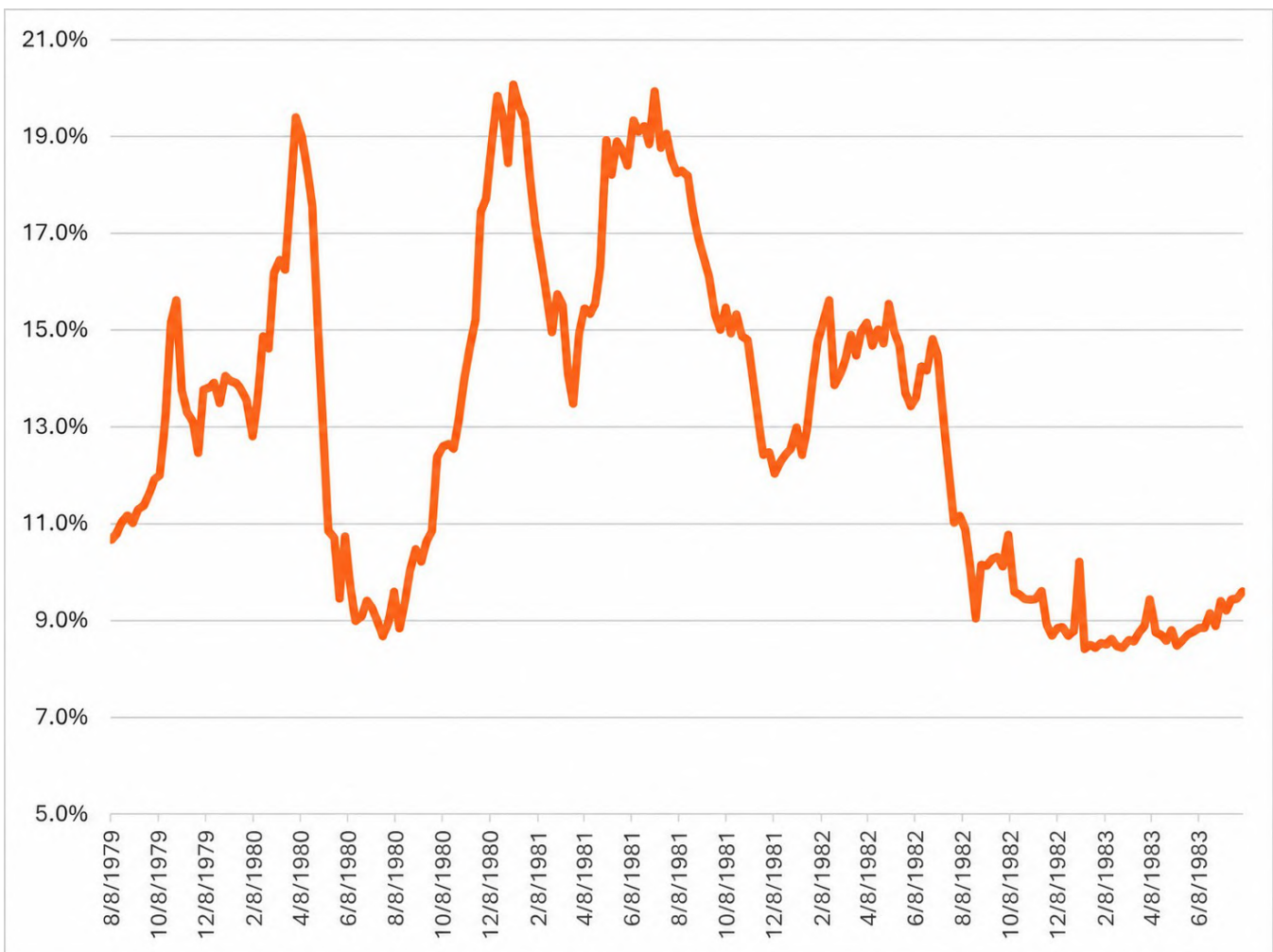
This golden era for bond investors was initiated by the “Volcker Shock,” doubling the Fed funds rate from 10% to 20% in his first seven months in office (1979-1980), and then imposing a second and third shock in 1981, pushing the Fed funds rate again to 20% (Chart 3).

These rate shocks broke inflation, but at the cost of a vicious recession that saw the unemployment rate rise to 10.7% in December 1982, the highest since the 1930s. This series of painful shocks broke inflation’s hold on the economy, but the sustained forty-year

trend of falling inflation and lower interest rates was propelled by a combination of highly favorable, and unrepeatable, occurrences.

Most importantly was the generation of excess savings that were cycled into financial assets. These excess savings were the result of a few key events of this era. The first was demographics. Baby boomers entered the workforce in record numbers, driving dependency ratios, the ratio of the non-working to the working population, lower. The higher the percentage of workers, the more savings that are generated.

Chart 3 Effective Fed Funds Rate, August 1979–August 1983

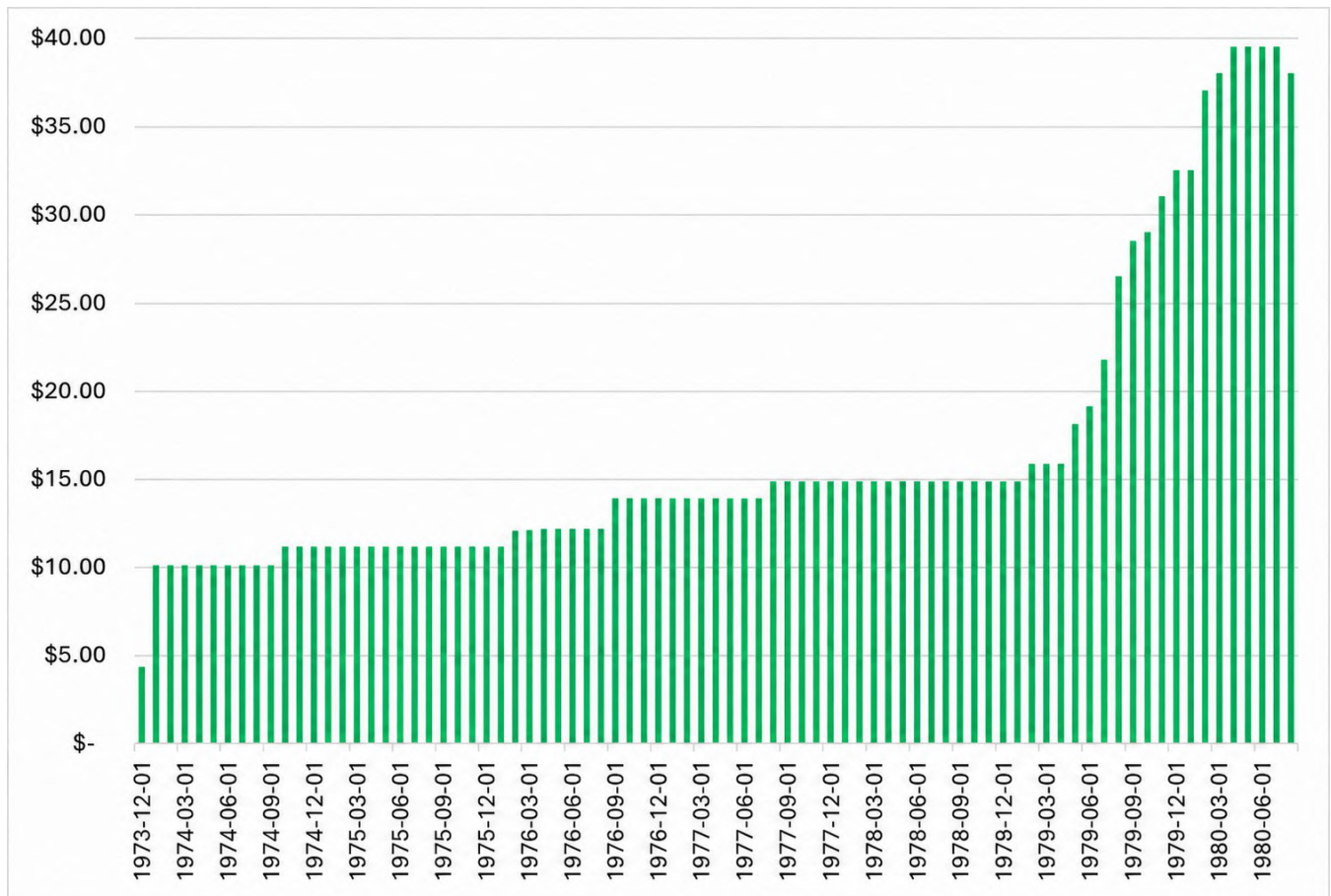


Source: FRBNY, Bloomberg

Secondly, enormous excess savings were generated in the oil-producing regions following the spikes in oil prices, doubling first in 1974 (from \$5 to \$10/barrel), and more than doubling again (from \$15 to \$40/barrel) in 1979 (Chart 4). In June 1974, US Secretary of State Henry Kissinger and Treasury Sec-

retary William Simon reached a (Faustian) bargain with the OPEC countries to recycle their “petrodollars” back into US Treasury bonds in exchange for military support. Our inability to protect Gulf and Saudi assets from Iranian and Houthi strikes this year likely means this arrangement is over.

Chart 4 West Texas Intermediate Price, 1973–1980

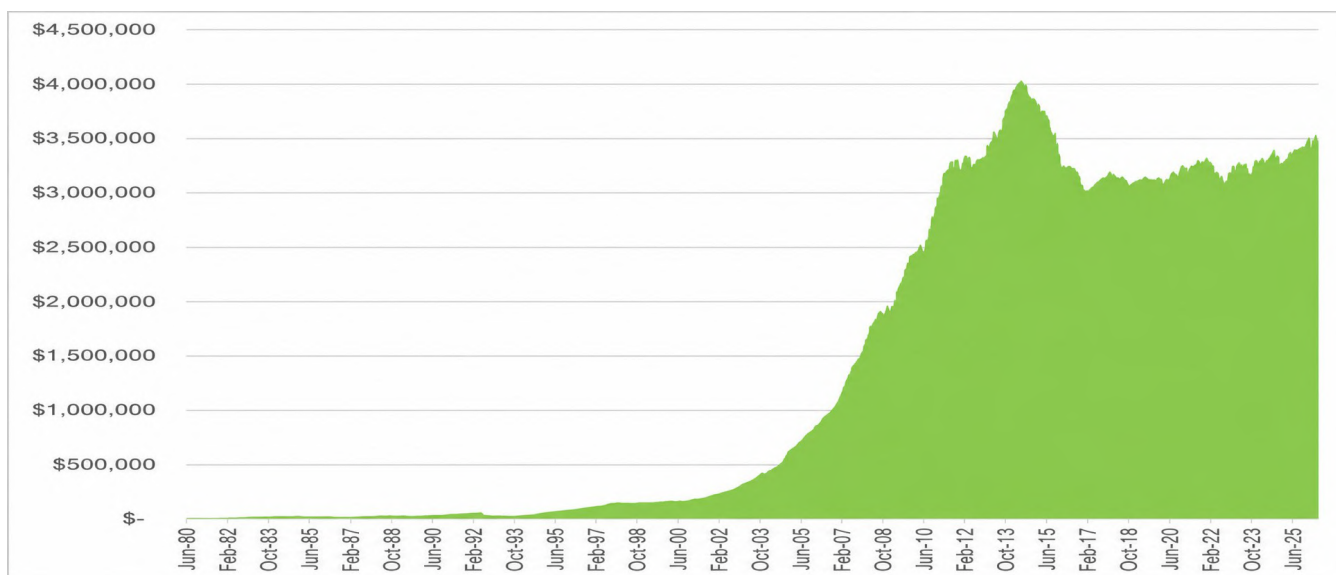


Source: FRBSIL

The next great source of excess savings came from China, whose foreign exchange reserves exploded from virtually nothing in the 1990s to over \$4 trillion in less than 20 years (Chart 5). The decline in Chinese reserves in recent years also portends an end to this source of excess savings.

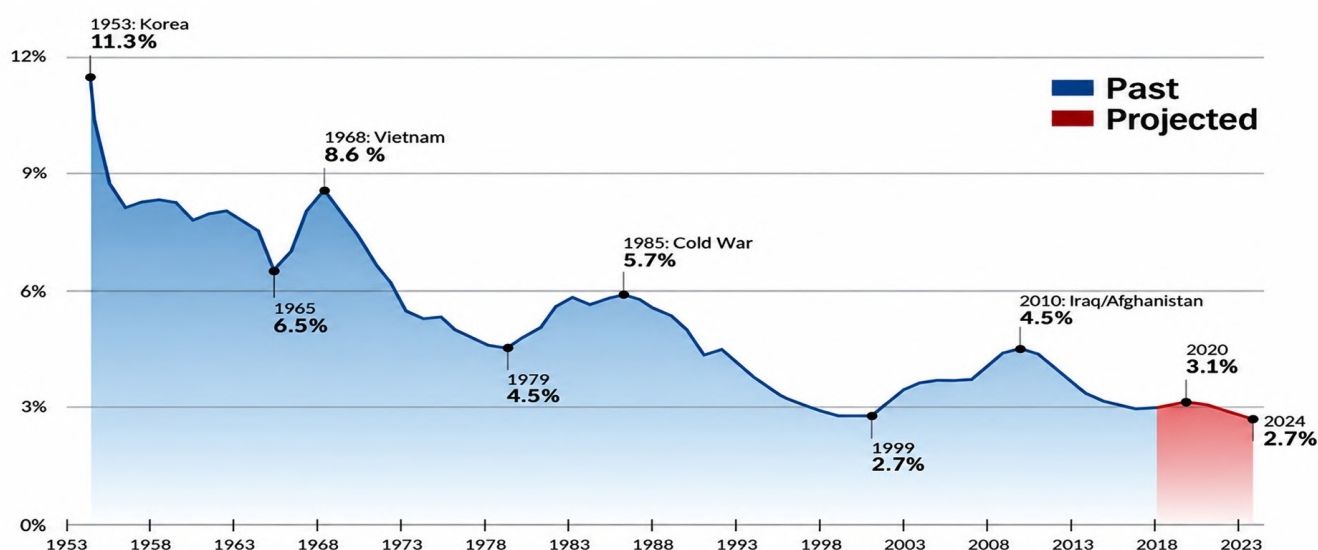
The sustained decline in defense spending over the past decades, accelerating after the collapse of the Soviet empire in 1991, was a windfall that has also added to the pool of available savings (Chart 6).

Chart 5 Foreign Exchange Reserves, China, USD MM, 1980–2026



Source: IMF

Chart 6 US Defense Spending as Pct. Of GDP, 1953-2024

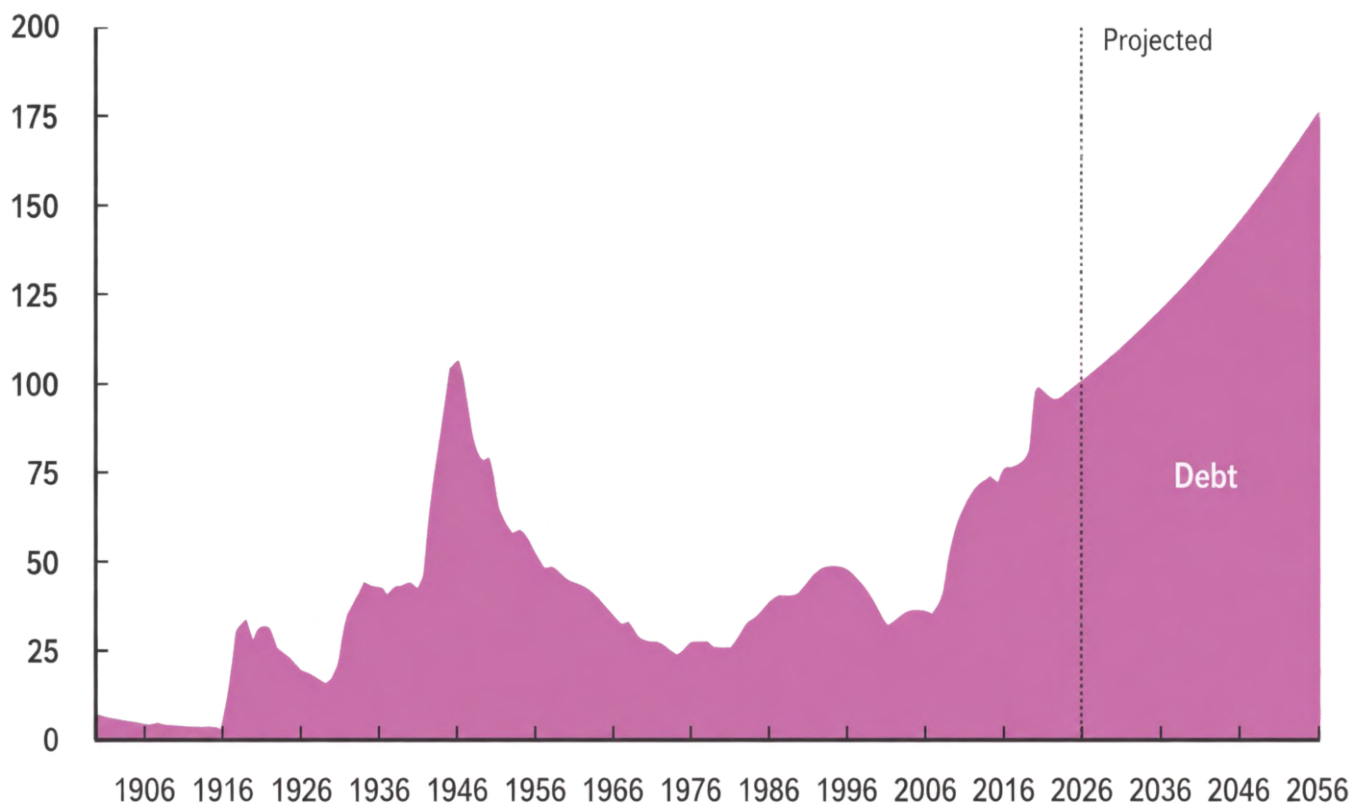


Source: US Department of War

All these trends—favorable demographics, export surpluses, declining defense spending—are now reversing. Aging populations have shifted from accumulating reserves to spending down their savings. Reserves holdings of US assets are falling, and defense spending is rising across the globe. The pool of savings, which helped to make credit cheap and plentiful, is shrinking.

The rising pressure on interest rates is compounded by three additional factors. The federal budget deficit, at \$2 trillion annually, continues to add to the supply of Treasury debt. Now at 100% of GDP, federal debt is projected to grow to 175% of GDP in the coming decades (Chart 7). Revenue as a percentage of GDP has held remarkably steady for the past fifty years. It's spending that has soared, especially in the

Chart 7 Federal Debt as Pct. Of GDP, 1906–2056 (proj.)



Source: CBO

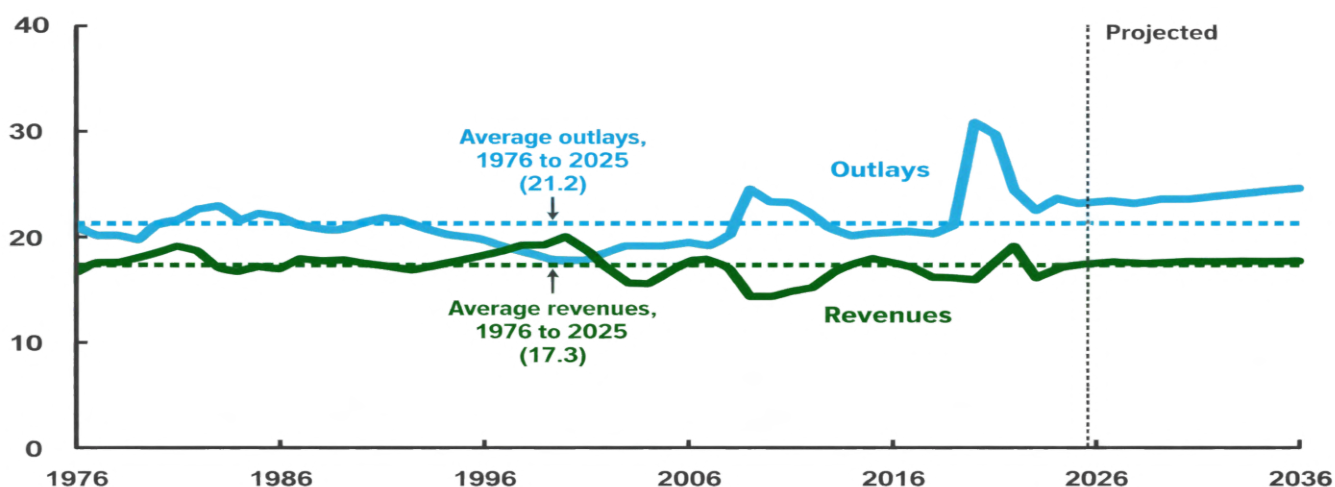
post-pandemic period (Chart 8). We have a spending problem, not a revenue problem, and there is no attempt to rectify it by any political faction.

While the federal government has been taking on debt for the past 25 years, households and corporations have delevered, thus strengthening their balance sheets. This, too, is now reversing as AI spend-

ing is poised to become the largest infrastructure program in history at 3.6% of GDP annually (Chart 9).

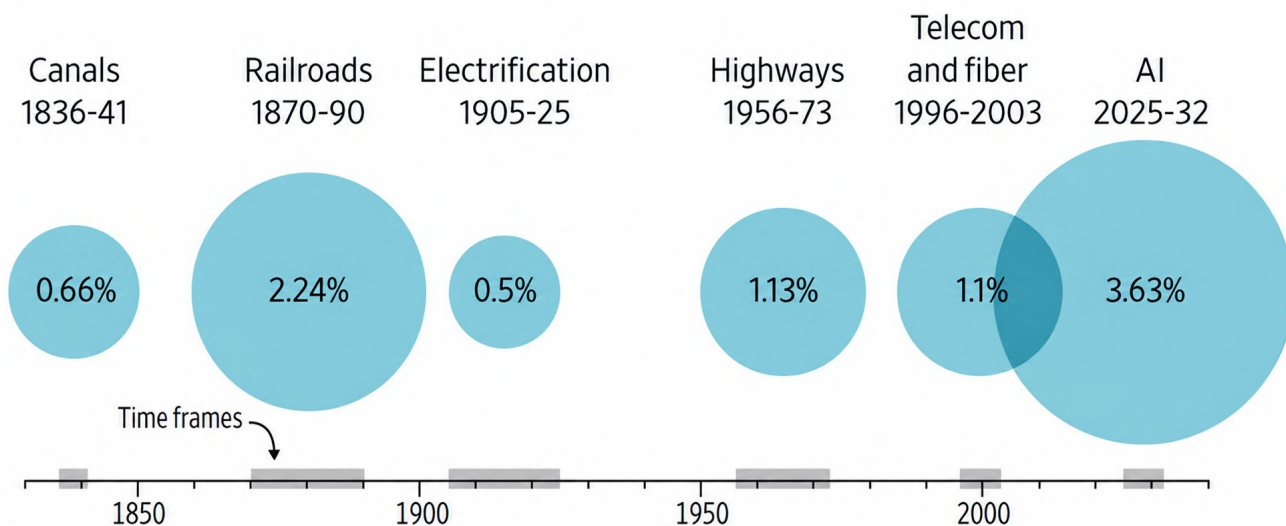
Rising levels of debt are pushing interest rates higher. Additionally, investors rightfully require a higher premium as geopolitical risks rise. Freezing Russia's foreign reserves after its 2022 invasion of Ukraine may have been justified on political grounds, but it

Chart 8 Federal Outlays and Revenues as Pct. Of GDP, 1976–2036 (proj.)



Source: CBO

Chart 9 US Annual Infrastructure Spending as Pct. Of GDP, Past 200 Years



Source: Van Nieuwerburgh, Stijn, *Financing the AI Buildout* (September 23, 2026), forthcoming in the *Brookings Papers of Economic Activity*, Fall 2026, Available at SSRN: <https://ssrn.com/abstract=6444363>

demonstrated that reserve assets are not immune to geopolitics. Numerous policies, from capricious tariffs to undermining political and economic treaties, international organizations and the rule of law, all serve to increase geopolitical risks, causing investors to seek both to reduce their holdings of US sovereign debt and to demand a greater premium to hold what they do own. OPEC and Asian exporting countries are now net sellers of USD reserves (Chart 10). Treasury debt is no longer the safe haven it was once, for all the economic and political reasons noted.

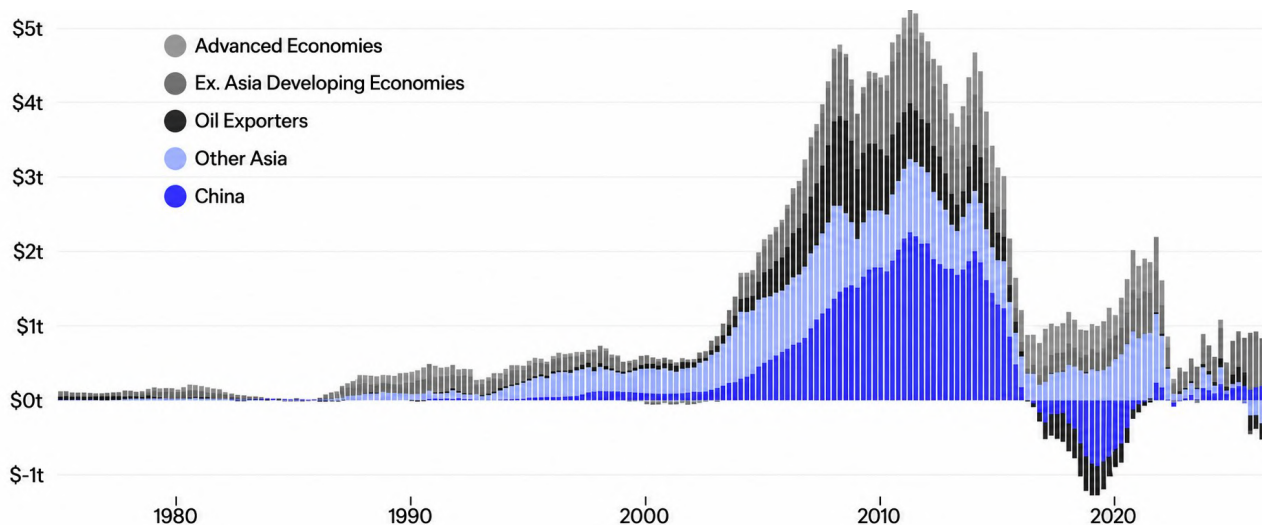
Inflation is structural. Savings are being drawn down as the population ages. Capital expenditures on AI infrastructure are of historic proportions. Governments are spending more on defense, and industrial policy is breaking efficient global supply chains through tariffs, sanctions and protectionism. The world order has been deliberately broken, and the unsurprising consequence is that geopolitical risks are rising. All of these trends are set to continue indefinitely, and all put upward pressure on inflation and interest rates. The golden era of bond investing died six years ago in the pandemic, and will not return in any foreseeable future.

Coinage in the Holy Roman Empire was established by decree that mandated that each coin consist of pure silver. Minting rights were granted to certain princes, and any alteration of the value of coins, fixed at 9 ½ gulden per Mark silver, was punishable by death.

Following the Battle of White Mountain in 1620, and the subsequent need for additional military outlays, financial pressures on the empire mounted. In 1622, Emperor Ferdinand granted Albrecht Wallenstein the monopoly rights to mint all the coins in Bohemia, Moravia and Lower Austria in exchange for a six-fold increase in payments to the crown. How was Wallenstein able to pay the emperor so much more? By debasing the coins.

Wallenstein collected coins of pure silver, melted them down, and restruck coins with less silver and added copper. The currency plummeted from 9 ½ gulden to over 79 gulden per Mark silver. Wallenstein was thus able to earn more nominal revenue, returning some to the emperor, and keeping the rest for himself. At first, this had the effect of spurring economic growth, with more currency in circulation the economy expanded, and Wallenstein took his grow-

Chart 10 Five-Year Rolling Change in FX Reserves, USD Tr., 1975–2026



Source: IMF, Corpay Currency Research

ing bundle of coins and purchased property. A lot of property. Enough in northern Bohemia to become the Duchy of Friedland.

Wallenstein thus successfully contrived to secure a minting monopoly, debase the currency by 88%, convert the excess nominal currency into real property, and become the richest man in the empire, after the emperor. After the initial spurt of economic growth, inflation caught up with the debased currency and the empire's finances were in ruin. But not Wallenstein's large and productive land.

By 1625, the emperor was desperate. Wallenstein stepped in to lend the emperor money, and personally raised an army, numbering in the tens of thousands, to support the emperor's wars. The Holy Roman Emperor was indebted, literally and otherwise, to Wallenstein. But other princes became jealous of Wallenstein's power and, in 1630, convinced Ferdinand to dismiss him. The emperor regretted this decision when the Protestant King Gustavus Adolphus of Sweden racked up victories against the Catholic Hapsburgs. Wallenstein returned, won several battles, and then negotiated a truce that preserved his own holdings and power.

Kipper comes from the old German word for clipping, the practice of shaving precious metals off the edges of coins. *Wipper* from the German for tipping scales, a deceitful practice by merchants to short-change customers. The resultant hyperinflation of 1622-23 in the Hapsburg Empire thus became known as *Kipper und Wipper*.

Governments, throughout history, seek power, and ultimately, that power is derived from money. There is thus a constant need to raise revenues, and strong incentives to do so without burdening one's constituents with higher taxes. Debasement of the currency, by reducing its metal content or simply printing more, can be a quick fix, but should fool no one, as the resultant inflation reduces the real, purchasing power of money, making the economy worse off, with higher prices, more debt and a devalued currency.

Wallenstein translated his military and political skills into a financial windfall for himself, and before the resulting inflation wrecked the Hapsburg economy, he converted soon-to-be worthless money into real, productive assets that were immune to currency devaluation.

Investors are well-advised to (re)consider what constitutes a safe haven asset, and what asset classes will protect value in real terms in the coming years, years in which elevated inflation will remain a constant presence. Equities, real assets, emerging country currencies may prove to be more secure, more stable, and more profitable than government bonds.

Wallenstein's immense skills—military, political, financial and administrative—elevated him from a poor Protestant family in the Catholic Holy Roman Empire to the closest confidante of the emperor and the richest man in the empire.

As Wallenstein's power and riches grew, so did the jealousies of his rivals who sowed the doubts of his loyalty to the emperor. At a banquet in 1634, Ferdinand ordered his murder, thereby offering us another lesson in the perils of living under a capricious, unchecked sovereign.



Portrait by Julius Schnorr von Carolsfeld, after a 1629 original by Anthony van Dyck. Bavarian State Painting Collections.



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