Status Quo of Debt Dynamics

History shows that once a nation has accumulated significant debt, there are only two ways to repay it: One is to simply declare bankruptcy – repudiate the debt. The other is to devalue the currency, destroying the prosperity of the common citizen.

Adam Smith

- **Thanks to two effects (high inflation and the base effect from the termination of Covid measures), nominal growth in 2022 was very high. This reduced debt/GDP levels.**
- **In 2023, these effects will no longer apply, and at the same time, inflation will become noticeable in budgets as an expenditure driver, through higher interest rates on government debt and higher (social) spending. As a result, inflation will no longer have a debt-relieving effect in the medium term.**
- **The tightening of monetary policy, if followed through as announced, would reduce demand for government bonds and would further increase pressure on yields.**
- **The geopolitical showdown has been reducing foreign demand for US government bonds for some time.**
- **In the US, a showdown on the debt ceiling is imminent. This showdown is made even more explosive by continuing very high budget deficits and the political polarization.**

Oh, what a feeling
When we're dancing on the ceiling.
Lionel Richie

In 1995, the US had its first political showdown over the debt ceiling. But unlike the countless previous increases – the debt ceiling had been raised 82 times since the end of World War II – this time it degenerated into a plaything of partisan interests, an expression of the deepening rift between the two political camps. The two protagonists: on the Democratic side, President Bill Clinton; on the Republican side, House Speaker Newt Gingrich. The Republicans had won both chambers of Congress in the November 1994 midterm elections. Bill Clinton was thus dependent on the approval of the Republicans. An agreement was finally reached in early August 1996. **At that time, in the first showdown, the US debt stood at USD 4.9 trillion, or 65% of GDP.**

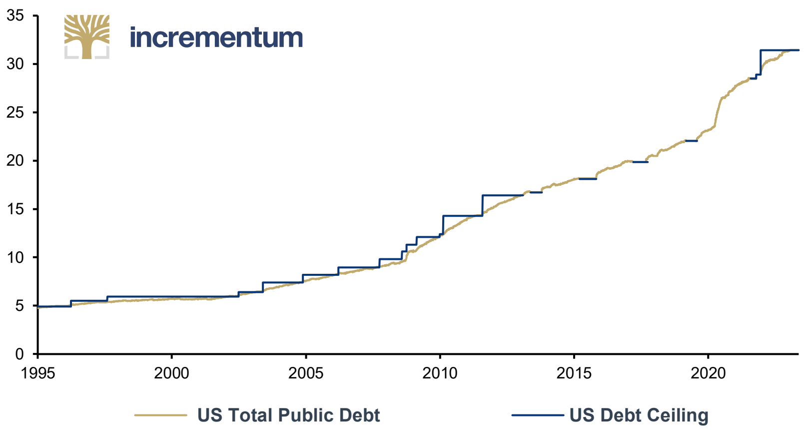
If we keep running deficits at this rate, we will need to think about what kind of debt burden we are going to leave for Keith Richards.
Kevin Muir

In 2011, the showdown was repeated. Democratic President Barack Obama faced Republican John Boehner, newly elected speaker of the US House of Representatives. The showdown was so fierce that the US, which was on the verge of default, lost its AAA rating three days after a political compromise was reached on Aug. 2, 2011, on a two-step increase in the debt ceiling. The downgrading by S&P led to "Black Monday" on the stock markets three days later. Around one month later, on September 6, 2011, gold marked a new all-time high of USD 1,920. **At that time, US debt amounted to around USD 16 trillion (94% of GDP) – three times as high as in 1995.**

I have one message for those observing or involved in the standoff over raising the US federal debt limit: Be afraid, be very afraid.
Bill Dudley

2023 will see a repeat of this showdown. Once again, the incumbent US president, Joe Biden, is a Democrat; once again, the new speaker of the House of Representatives is a Republican, Kevin McCarthy; and once again, the Republicans took over the House of Representatives from the Democrats in the 2022 midterm elections. **The national debt is now USD 31.4 trillion, or 121% of GDP.**

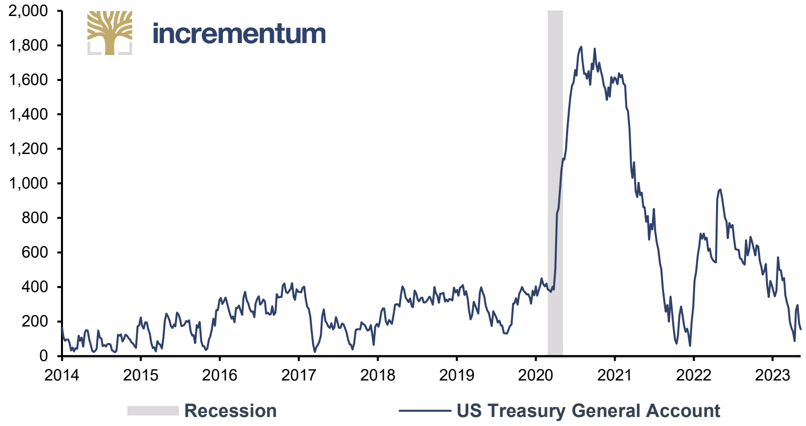
US Total Public Debt and Debt Ceiling, in USD trn, 01/1995-05/2023



Source: U.S. Department of the Treasury, Incrementum AG

Since January 19, 2023, US Treasury Secretary Janet Yellen has been driving a crisis course. *Extraordinary measures* have been set to reduce current government spending. Thanks to Washington's amply funded checking account at the Federal Reserve, the Treasury General Account (TGA), the fact that the debt ceiling was reached on January 19 has for now remained without consequences. However, the expected hardball political showdown has only been postponed, not cancelled. **In June, shortly after the publication of this *In Gold We Trust* report, it will finally be showdown time.**

US Treasury General Account, in USD bn, 01/2014-05/2023



Source: Reuters Eikon, Incrementum AG

Democrats and Republicans are like two bald men fighting over a comb. It's entertaining, but ultimately pointless.
Jorge Luis Borges

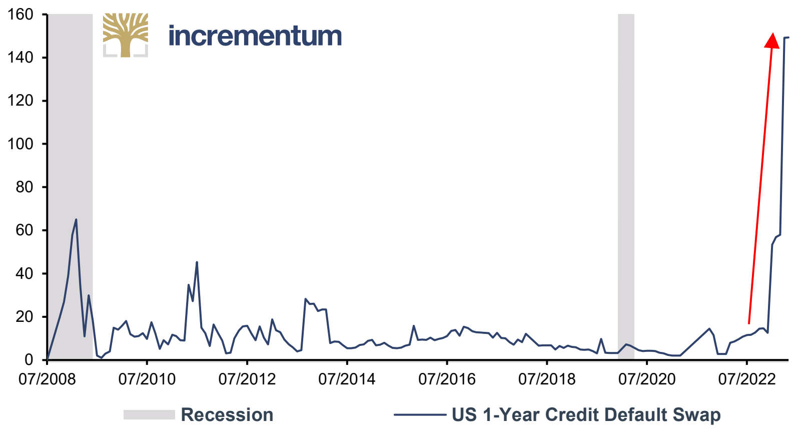
There is no doubt that the debt ceiling will be raised again. It would be the 79th increase since 1960, the 21st since 2000, and the 30th under a Democratic president, while under Republican presidents the debt ceiling has been raised 49 times. The only open question at the moment is what political compromises will have to be made to reach an agreement. After all, it is less than a year and a half until presidential and congressional elections are held again in the US, in a political atmosphere that is becoming increasingly heated and polarized.

Either the State ends public debt, or public debt will end the State.
David Hume

A little interesting historical sidenote: The government under Dwight D. Eisenhower chose a special solution to prevent insolvency in 1953. The Federal Reserve' s balance sheet still contained gold whose valuation had not yet been revalued to the new parity of USD 35 per troy ounce of gold established in 1934. The Federal Reserve credited these profits from the monetization of gold to the account of the US Treasury. A total of USD 500mn was monetized in this way in early November 1953, thus preventing Washington's insolvency. In the spring of 1954, Congress finally raised the debt ceiling so that bond issuance could continue.

A more intense debate about a sovereign default by the US, would have far-reaching consequences for the global economy and for financial markets. In view of the looming geopolitical showdown, a US sovereign debt crisis would further damage the US's already shaken supremacy.

US 1-Year Credit Default Swap, 07/2008-05/2023



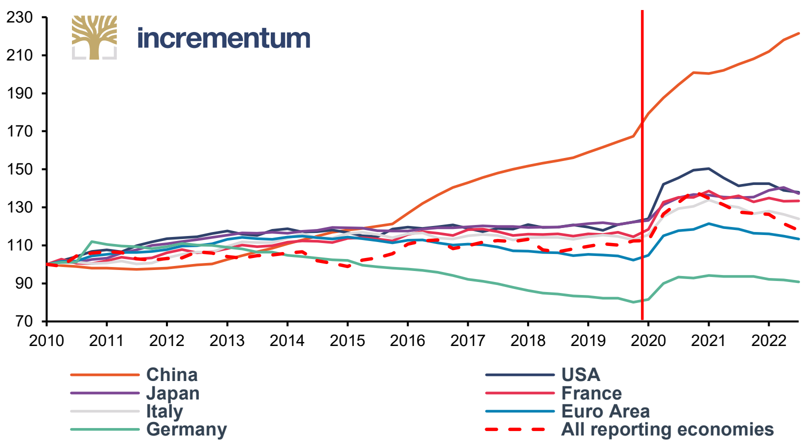
Source: Reuters Eikon, Incrementum AG

Appearances Continue to Be Deceptive When It Comes to Government Debt

Reality is easy. It's deception that's the hard work.
Lauryn Hill

"Appearances are deceptive" – this is how we opened this chapter in the *In Gold We Trust* report 2022. And this line remains equally true in 2023. At first glance, the situation regarding government debt eased noticeably in 2022; but, as last year, that was only at first glance. Once again, government debt ratios declined. Notable exceptions were China and Japan, where debt increased by 5.6 and 3.8 percentage points respectively.

Public Debt, as % of GDP, 100 = Q1/2010, Q1/2010-Q3/2022



Source: Reuters Eikon, Incrementum AG

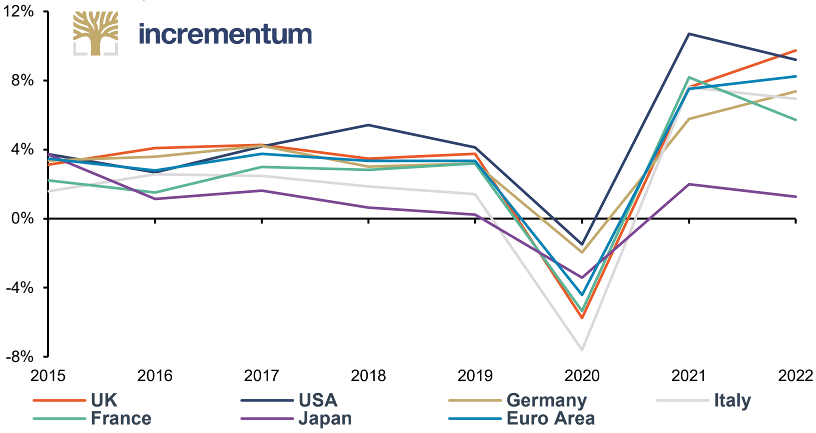
Once again, however, this decline in most countries was not due to sustained consolidation of government budgets but, as in 2021, to exceptionally strong growth in nominal GDP. 2022 was the second – and last – year for government debt in most leading economies to be positively impacted by Covid-related effects.

Two special factors are responsible for this. First, 2022 was marked by economic normalization after the pandemic. This base effect[13] due to the lifting of

[13] See "The Status Quo of Debt Dynamics," *In Gold We Trust* report 2022

measures will disappear completely in 2023, with the notable exception of China, which in a radical about-turn only abandoned its restrictive "zero Covid" policy in January. Nominal economic growth rates in 2022 were impressively high, well above the long-term average. As we will see, however, this only *temporarily* reduces public debt ratios.

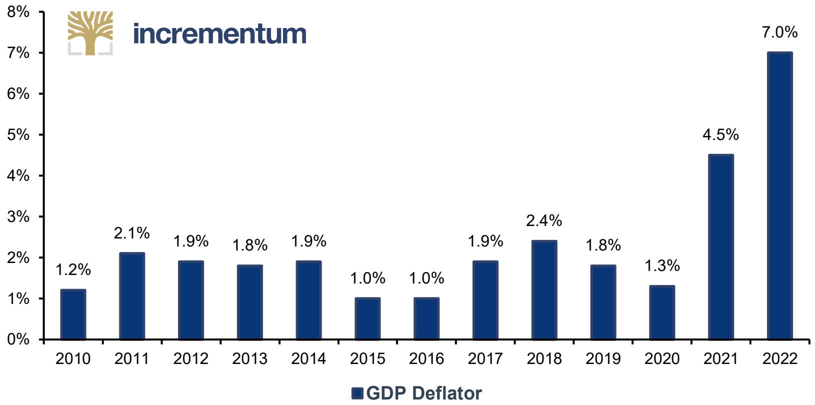
Nominal GDP Growth, UK, USA, Germany, Italy, France, Japan, Euro Area, 2015-2022



Source: Reuters Eikon, Incrementum AG

The second factor pushing up nominal GDP growth in 2022 was high inflation. At 7.0%, the GDP deflator[14] for the USA in 2022 was markedly higher than in the low-inflation years before 2021, following an already impressive 4.5% in 2021.

GDP Deflator, USA, 2010-2022

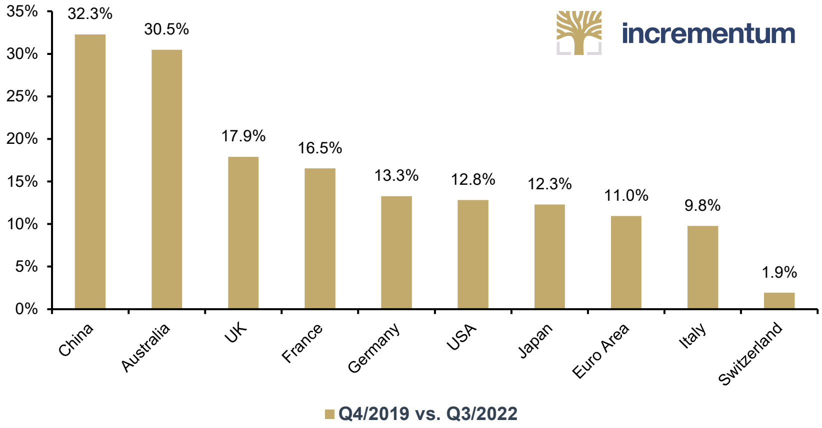


Source: BEA, Incrementum AG

However, it would not only be premature to sound the all-clear on the sovereign debt front, it would be completely wrong. Politically exploited appearances are deceptive. Compared with the pre-Covid era, public debt as a percentage of GDP is still significantly higher.

[14] In contrast to common inflation concepts such as CPI, PCE, or HICP, the GDP deflator captures the price development of all GDP-relevant goods and services, not only that of consumer goods.

Public Debt as % of GDP, Percentage Increase from Q4/2019 to Q3/2022

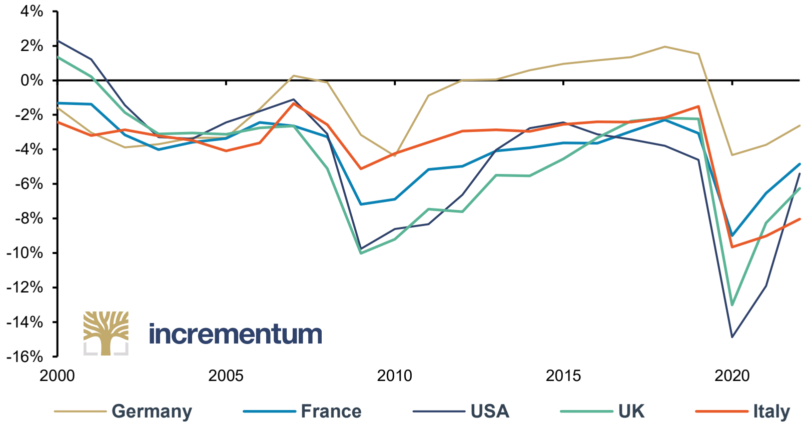


Source: Reuters Eikon, Incrementum AG

I think the Bayern coach is the second hardest job in Germany, after the Chancellor.
Juup Heynckes

This is not surprising, given that the rigorous measures to combat the coronavirus have noticeably impaired economic growth and caused government spending to skyrocket. Germany, admittedly a negative example, achieved just about the same real GDP at the end of 2022 as it did at the end of 2019. And despite bubbling tax revenues due to inflation, states have not managed to get their deficits under control.

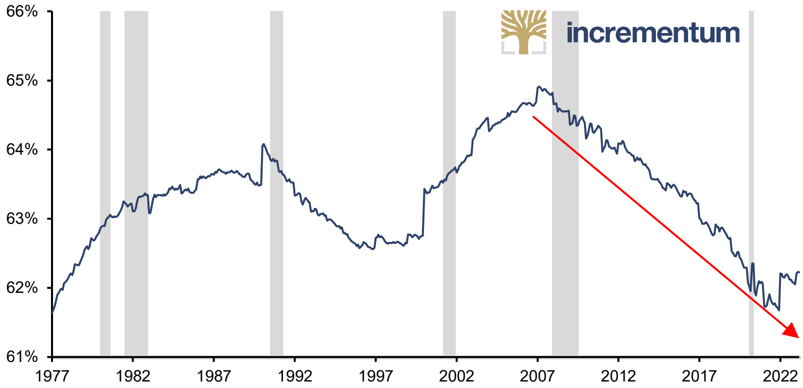
Budget Balance, as % of GDP, Germany, France, USA, UK, Italy, 2000-2022



Source: Reuters Eikon, Incrementum AG

This would be a much better world if married couples were as deeply in love as they are in debt.
Earl Wilson

Government debt ratios are not only coming under pressure from secular developments such as demographic change. In more and more countries, work force potential is declining and with it the share of the population that is productively active and whose current income can thus be taxed to cover government spending. At the same time, the aging of society is leading to higher healthcare and pension expenditures, especially if the retirement age is not or only insufficiently adjusted to higher life expectancy. However, economic developments in recent years apart from the Covid period are also putting a strain on government finances. This strain is in part still hidden, in part creeping, in part only in the initial stages.



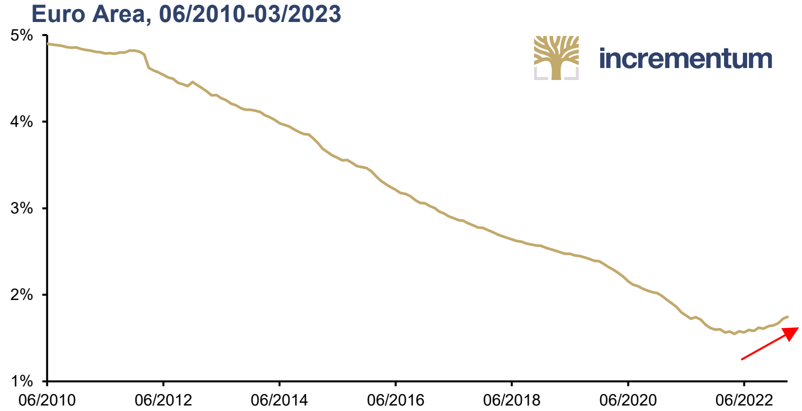
Source: Federal Reserve St. Louis, Incrementum AG

Pressure on public finances increases

Higher interest payments as a result of the significant increase in yields

Interest rates are like relationships; when they're low, everyone wants to get in on the action, but when they're high, you start questioning your life choices.
Unknown

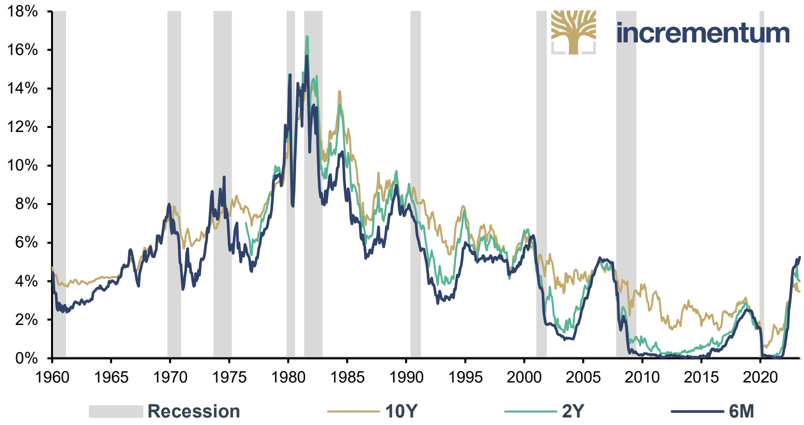
Extremely low interest rates in recent years, coupled with the voluptuous government bond purchase programs of the central banks gradually pushed down the interest burden on governments in the 2010s. This freed up considerable amounts in government budgets for other spending purposes. **The time of these special dividends to the state is now over. The average interest rate on government debt is now already on the rise, albeit at a still very low level of increase.**



Source: ECB, Incrementum AG

This trend reversal, which has so far been slight, is likely to accelerate rapidly and become a burden for government budgets. Less than two years ago, the yield on the 10-year US Treasury was around 0.5%. Less than a year ago, in the summer of 2022, it was around 1.2%. That still represented an increase of almost 150%. In mid-October 2022, the 4% mark was reached for the first time since October 2008. Calculated from the low point at the beginning of August 2020, this is an eightfold increase. Until mid-May the yield eased again to 3,6%.

US 10Y, US 2Y, and US 6M Government Bond Yield, 01/1960-05/2023

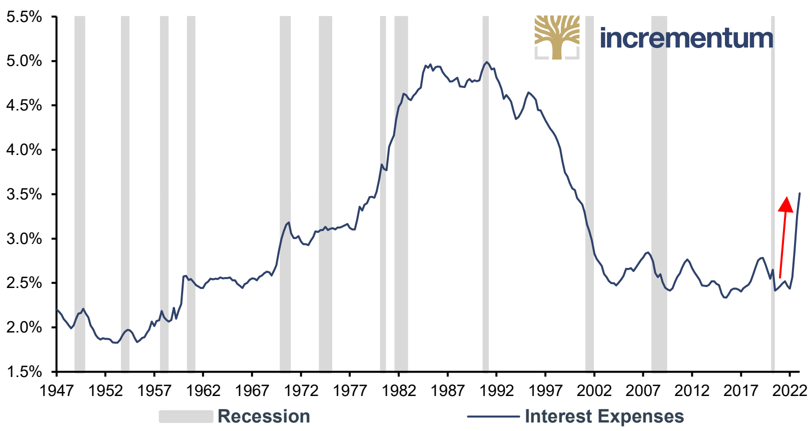


Source: Reuters Eikon, Incrementum AG

Mountains are not fair or unfair, they are just dangerous.
Reinhold Messner

And for finance ministers, who in recent years have only walked on the flat because of the low interest rates, these hills are *relatively* ambitious mountain tours despite the *absolutely* low altitude. Just as a hiker who starts his tour on an island at sea level sometimes covers more vertical meters than a hiker in the Alps who starts his mountain jaunt already at 1,500 meters elevation.

Interest Expenses, as % of GDP, USA, Q1/1947-Q1/2023



Source: Federal Reserve St. Louis, Incrementum AG

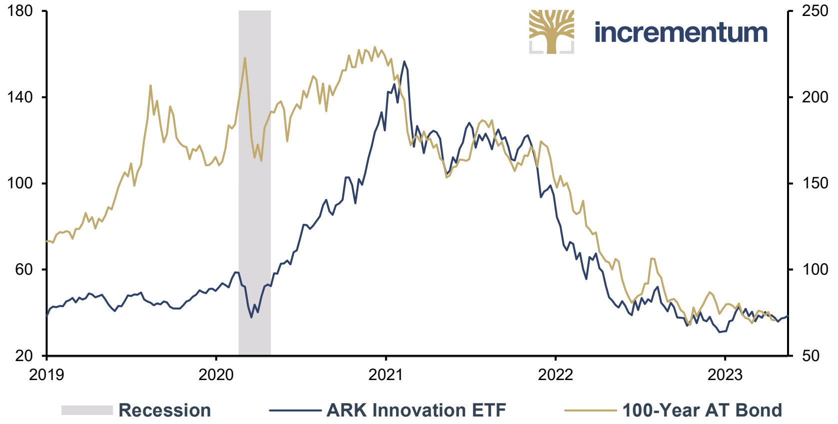
To ease the burden on sovereigns, central banks could soon use the instrument of yield curve control (YCC).[15] The BoJ has already been using this instrument since 2016. The fact that the interest rate cap was raised from 0.25% to 0.50% on December 20, 2022, in a move that surprised everyone, does not change this. The swelling of the BoJ' s balance sheet to a new record level in February 2023 is therefore hardly surprising.

Those who eagerly bought the two issues of 100-year Austrian government bonds are currently suffering a little lesson in duration risk. As a reminder, Austria issued two 100-year bonds, in 2017 and 2020, with

[15] *See* "The Status Quo of Debt Dynamics," *In Gold We Trust* report 2022; "Yield Curve Control, the Biggest Mistake of the ECB So Far! – Exclusive Interview with Russell Napier," *In Gold We Trust* report 2021

coupons of 2.100% (2017) and 0.850% (2020). Both bonds were heavily oversubscribed. Both bonds are currently well below their respective highs of 247.64 and 138.46 and, at around -30% and -60% respectively, also well below the issue price. The slump is strongly reminiscent of the price slide in technology stocks, which are also extremely sensitive to interest rates.

ARK Innovation ETF (lhs), and 100-Year AT Bond 2017 (rhs), in %, 01/2019-05/2023

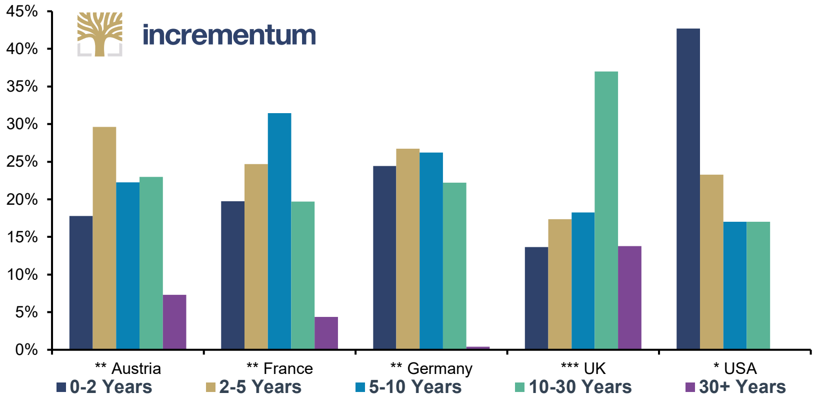


Source: Frankfurt Stock Exchange, Reuters Eikon, Incrementum AG

Bond maturity gives finance minister sleepless nights

The speed at which the rise in bond yields feeds through to budgets depends on both continuing fiscal discipline and on the residual maturity of existing debt. This varies quite considerably from state to state.

Marketable Government Debt by Maturity, in % of Total, * 01/2023, ** 02/2023, * 03/2023**



Source: OeBFA, Bundesrepublik Deutschland – Finanzagentur GmbH, Agence France Trésor, UK Debt Management Office, U.S. Department of the Treasury, Incrementum AG

The US is as far from a balanced budget as Joe Biden is from puberty.
***In Gold We Trust* report 2022**

For the federal budget of the USA, the refinancing requirements in the coming years represent a considerable burden. According to calculations by Horizon Kinetics, the USA will have to refinance half of its national debt of more than USD 35trn by 2025. Should the financing and refinancing succeed at an average rate of 4.4% and the remaining interest on the national debt remain at around 2.4%, the interest service would more than double to USD 1.2trn by 2025. 25% of federal tax revenues would go to interest service alone in this scenario, which would be historically unprecedented. This would be equivalent to nearly 4.4% of GDP.[16] This estimate is significantly higher than the CBO's 3.6%.

[16] Horizon Kinetics: "4th Quarter Commentary – January 2023", January 2023

Maturity of US Debt

Maturity	Years to Maturity	Running % Maturities of All Outstanding	Weighted Avg. Maturity Cumulative
01/2024	1	30.0%	0.3
01/2025	2	42.5%	0.5
01/2026	3	51.7%	0.8
01/2027	4	59.0%	1.1
01/2028	5	65.9%	1.5
01/2029	6	71.3%	1.8
01/2030	7	75.3%	2.1
01/2031	8	80.5%	2.3
01/2032	9	80.7%	2.5
01/2033	10	82.9%	2.8
02/2043	20	87.5%	4.1
11/2052	30	100.0%	7.2
Total Amount Outstanding at 12/31/2022 (in USD mn):		238,001,119	7.2

Source: Horizon Kinetics, Incrementum AG

In exceptional cases, even today the current-issue yield of new issues and stock-up of existing bonds is lower than the interest on maturing bonds. This is the case for all bonds whose original maturity – depending on the country – was at least 10 to 15 years. Some Italian bonds, for example, still fall into this category.

Italy is a country where even the pigeons walk around with style and flair. It's contagious!
Andrea Pirlo

However, Italy also has significant refinancing needs in the coming years. While the average maturity of Italian debt is around seven years, the median maturity – the point at which half of the outstanding debt falls due – is around five years. In view of the high refinancing needs and the associated burden on government budgets, it is more than questionable whether the ECB will stand idly by and watch a sharp rise in yields and, especially, spreads. After all, the Club Med countries have a majority on the ECB Governing Council.

The EU reached an agreement – except it was the kind of agreement only the EU can reach; an agreement about which everybody involved disagrees.
Grant Williams

Relief is coming for Italy and all economically weak EU countries from the NextGenEU fund, the Covid crisis-management fund fed by EU-wide debt borrowing. Non-repayable grants amounting to 1% of GDP will flow to Italy until 2023. In addition, Italy will receive soft loans of roughly the same amount. But of course, these grants will have to be financed. Clemens Fuest, president of the ifo Institute, estimates that NextGenEU will increase the government debt ratio in the EU by 5.5 percentage points.

Inflation-indexed bonds as a fiscal own goal

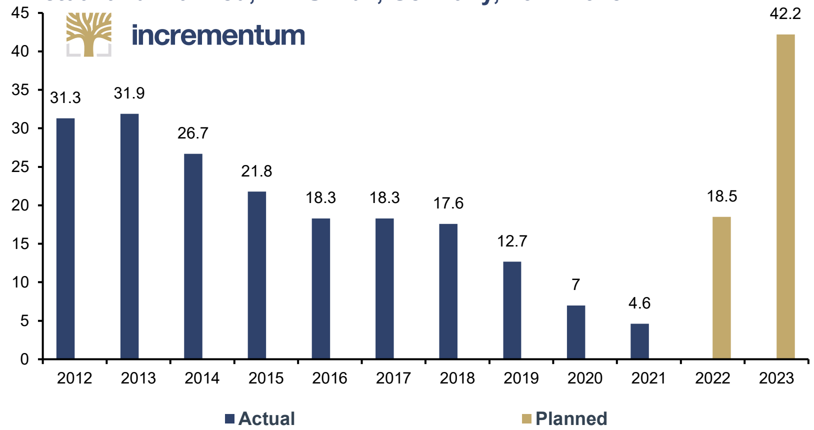
Obviously, the rise in interest rates has had a large impact on inflation-indexed bonds , whose coupons are linked to the inflation rate. In Germany, Finance Minister Christian Lindner calculated already in the summer of 2022 that interest payments on Germany' s inflation-indexed bonds would be around EUR 7.6bn in 2023. That is EUR 3bn more than last year and almost EUR 7bn more than in 2021, meaning that interest expense would have increased roughly tenfold in three years . Although inflation-indexed bonds account for only

5% of total German bond holdings, 25% of total German interest payments on government debt are now incurred for this type of bond.

Poor old Germany. Too big for Europe, too small for the world.
Henry Kissinger

But this estimate is likely to prove far too low. For at the end of February, Finance Minister Lindner once again shocked the public. He announced his estimate that in the current year the interest service on the federal government's debt is likely to increase almost tenfold to around EUR 40bn within just two years. In the summer of 2022, Lindner had still assumed an increase to "only" EUR 30bn. Interest service should thus account for more than 8% of all federal spending in 2023, compared with just 0.7% in both 2020 and 2021. After all, the yield on the 10-year federal bond was still -0.27% in January 2020 and was quoted at just below 2.60% at the end of February 2023. In relative terms, however, spending on interest service was higher until 2014, and even in the double-digit percentage range in 2013.

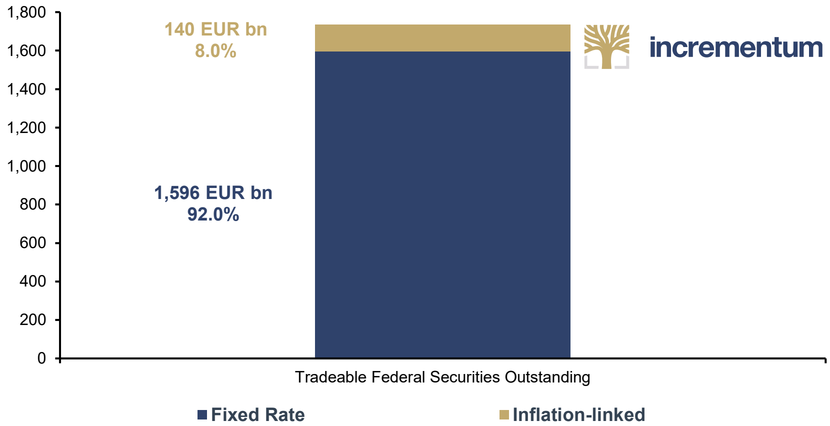
Interest Payments of the Federal Government for Federal Debt, Actual and Planned, in EUR bn, Germany, 2012-2023



Source: Bundesministerium der Finanzen, Incrementum AG

The following chart shows the share of inflation-indexed bonds in the total bond portfolio.

Tradable Federal Securities Outstanding, in EUR bn, Germany, 2023



Source: Federal Republic of Germany - Finance Agency GmbH, Incrementum AG

USA: No budget consolidation in sight

It's clearly a budget. It's got a lot of numbers in it.
George W. Bush

For the US, the Congressional Budget Office (CBO) warned as early as November 2022 that the US deficit in 2023 was likely to be 20% to 30% higher than in the May 2022 forecast, and for 2024 the deficit could exceed the old May 2022 estimate by as much as 46%.

For 2023, a budget deficit of around USD 1.5trn or approx. 5.8% of GDP is now expected, after 14.9% (2020), 11.9% (2021) and 5.5% (2022). At 5.5%, last year's budget deficit was almost 2 percentage points or more than 50% higher than the average of the past 50 years.

We could say the government spend like drunken sailors, but that would be unfair to drunken sailors, because the sailors are spending their own money.
Ronald Reagan

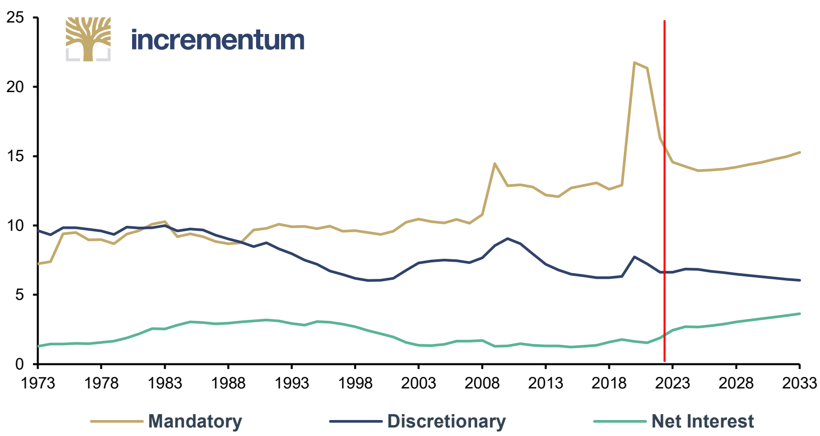
And the accounting for the first few months of the fiscal year, which runs from October 2022 to September 2023, suggests that CBO' s fears of USD 1.4trn in new debt are on the optimistic side. This is because, in the first six months of fiscal year 2023 (October-March), the US federal budget already posted a deficit of USD 1.1trn. That's up USD 431bn, or 64%, from a year earlier. Before the Covid pandemic, the USD 1trn mark was still considered the limit that must not be exceeded. It has now been easily broken after half a year.

The following calculations by the CBO show how tight the fiscal situation in the US is. For 2033, the CBO expects a budget deficit of 7.3% or USD 2.9trn. **In order to be able to present a balanced budget in 2033, all expenditures excluding interest payments would have to be reduced by 35%.**

The budget was unlimited, but I exceeded it.
Donald Trump

The combination of high budget deficits, which will continue to swell to 6.9% and beyond, and higher interest rates will cause interest service as a percentage of GDP to rise markedly in the coming years. Compared with today, CBO projects that it will nearly double over the next 10 years. Finally, CBO projects that the United States will run significant primary deficits of at least 2.5% by 2033. **For the full 10-year period through 2032, the CBO raises the estimate for the cumulative budget deficit to USD 3.1trn, 20% higher than in the May 2022 forecast.**

Outlays by Category, as % of GDP, USA, 1973-2033

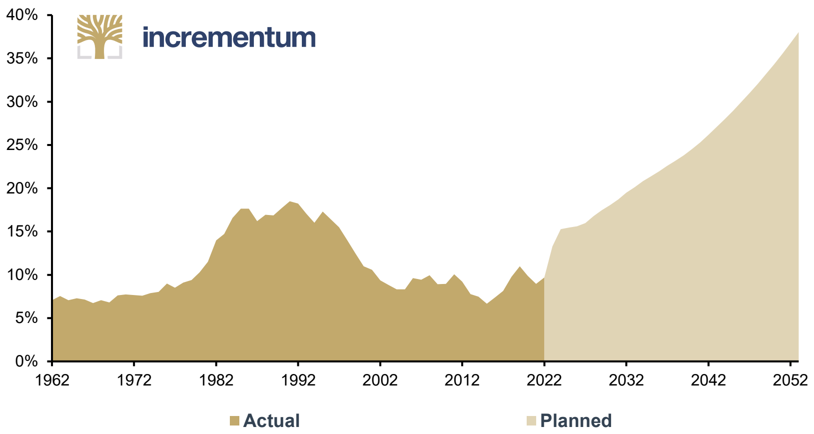


Source: CBO, Incrementum AG

What if I say I'm not just another one of your plays?
You're the pretender.
Foo Fighters

The figures are even more worrying if interest service is referred to tax revenues rather than GDP. Although referring to tax revenues is not common, it is economically and fiscally appropriate. After all, referring to GDP assumes, on the one hand, that the government has a claim on all economic output. On the other hand, it pretends that ever higher taxation – as a result of rising interest service – has no impact on the population's eagerness to work and thus on GDP.

Interest Expenses, as % of Tax Revenues, USA, 1962-2053

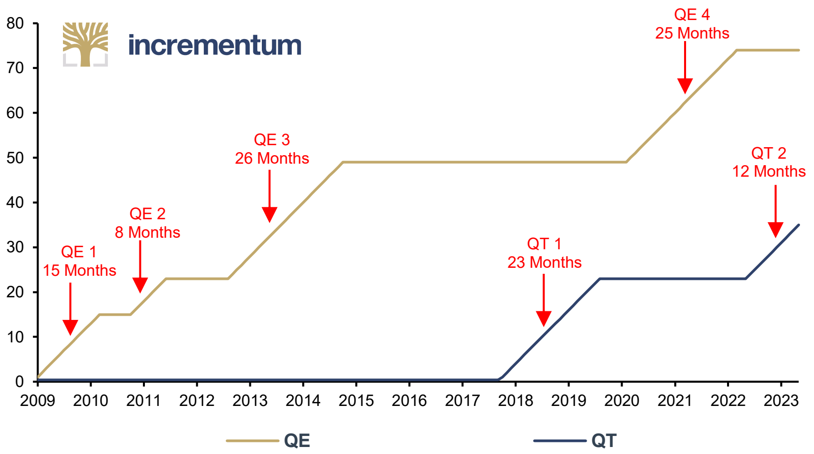


Source: CBO, Incrementum AG

The tightening of monetary policy puts a strain on government budgets

With the onset of unconventional monetary policy, central banks increasingly acted as buyers of government bonds over the past 15 years, through various QE rounds.

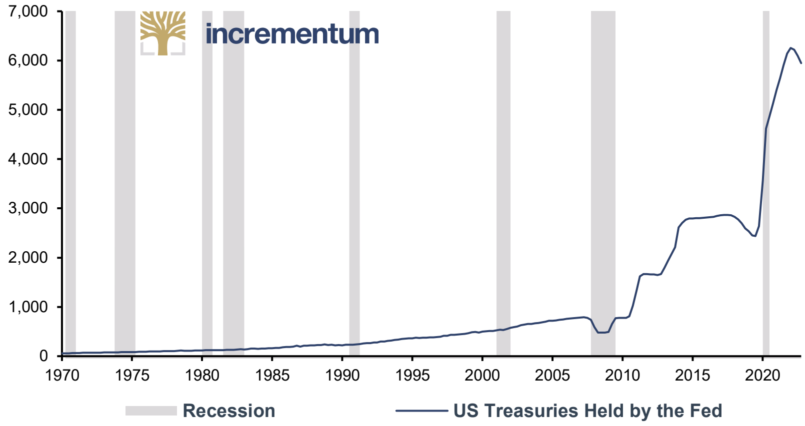
QE vs. QT, in Months, 01/2009-05/2023



Source: Reuters Eikon, Incrementum AG

The volumes purchased were so extensive that this additional demand undoubtedly had a dampening effect on government bond yields. The Federal Reserve estimates that the QE programs may have depressed the yield on 10-year US Treasuries by 100 basis points.

US Treasuries Held by the Fed, in USD bn, Q1/1970-Q4/2022



Source: Federal Reserve St. Louis, Incrementum AG

Monetary policy has become asymmetric due to over-indebtedness. This means that an easing of policy produces little stimulus while a modest tightening is very powerful in restraining economic activity.
Lacy Hunt

Alongside interest rate hikes, the reduction of central bank balance sheets represents the second major instrument of monetary policy tightening. After central banks stopped expanding their balance sheets in 2022 as the first step of the normalization process, the second step was *QT light*, the *passive* shortening of the balance sheet by not fully reinvesting maturing bonds. The Federal Reserve has practiced *QT light* since June 2022, and to a greater extent since September 2022. The ECB, again the latecomer, has been at it since March 2023.

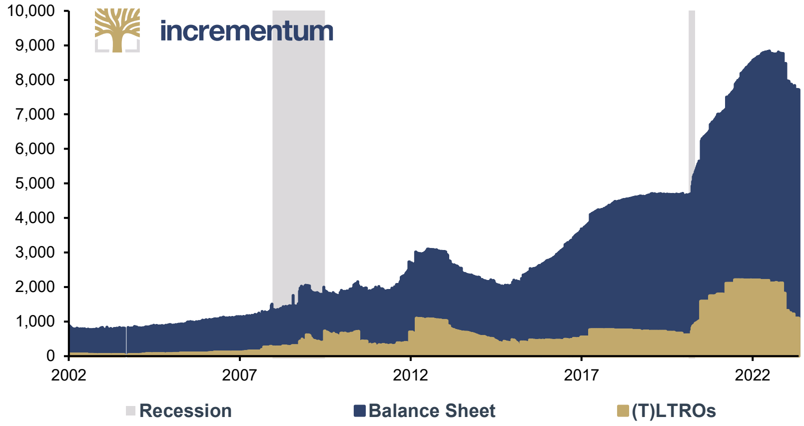
Courtesy of Hedgeye

As a further tightening of the tightening policy, so to speak, *QT heavy* , the outright sale of government bonds, would be available as an instrument – at least in theory. This *active* contraction of the balance sheet would be the exact mirror image of the outright purchase of government bonds in the context of the unconventional monetary policy measures that have been ongoing for more than a decade and have now become conventional. After all, there is nothing more permanent than a stopgap measure. Or to put it another way, the state of crisis has become the norm. The fact that there was once a time when central banks merely took government bonds onto their books temporarily as collateral for what was usually a two-week repo transaction sounds like a tale from a bygone era.

People vastly underestimated the power of QE. And they are in danger of doing the same with QT.
Franz Lischka

One special feature should not go unmentioned at this point. The decline in the Eurosystem's balance sheet total by around 1 trillion euros to slightly less than 8 trillion euros should not be overlooked. The 8 trillion is almost exclusively attributable to the expiration or early repayment of targeted longer-term refinancing operations (TLTROs) by commercial banks.

ECB Balance Sheet, and (T)LTROs, in EUR bn, 01/2002-05/2023



Source: ECB, Reuters Eikon, Incrementum AG

One of the tests of leadership is the ability to recognize a problem before it becomes an emergency.
Arnold H. Glasgow

While LTROs were originally limited to a term of three (and a maximum of 12) months, this was extended to three years in 2011 in the wake of the euro debt crisis, in order to stabilize the banking sector. Unflatteringly, this striking extension of the term was given the catchphrase "Big Bertha", originally the designation for a German World War I howitzer. Starting in 2014, the LTROs were adjusted to explicitly encourage banks to lend to the public, hence *targeted* longer-term refinancing operation.

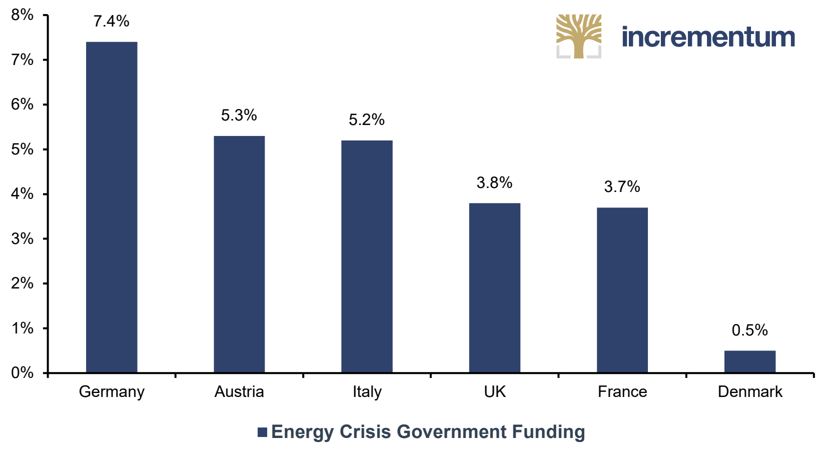
Energy price and inflation control as the next fiscal burden

The extreme fiscal efforts to combat the Covid-19 pandemic will be followed by the next surge in spending with the support payments to combat inflation[17] and high energy prices as well as the inflation indexation of pensions and social spending, newly introduced in some countries. According to IMF calculations from December 2022, the additional spending on support measures for private households in Europe for the years 2022 and 2023 already adds up to appreciable amounts: UK: 5.1%, France: 4.3%, Austria: 4.1%, Italy: 2.8%, Germany: 2.5%

If we consider all the support measures for private households *and* companies, we are already moving into much higher dimensions.

[17] For an overview of measures taken in the first half of 2022, see Amaglobeli, David et al: "Policy Responses to High Energy and Food Prices," IMF Working Paper No. 2023/074, March 24, 2023, pp. 17f., Annex II-IV

Energy Crisis Government Funding, as % of GDP, 09/2021–01/2023



Source: Bruegel, Incrementum AG

Down down deeper and down,
Get down deeper and down.
Status Quo

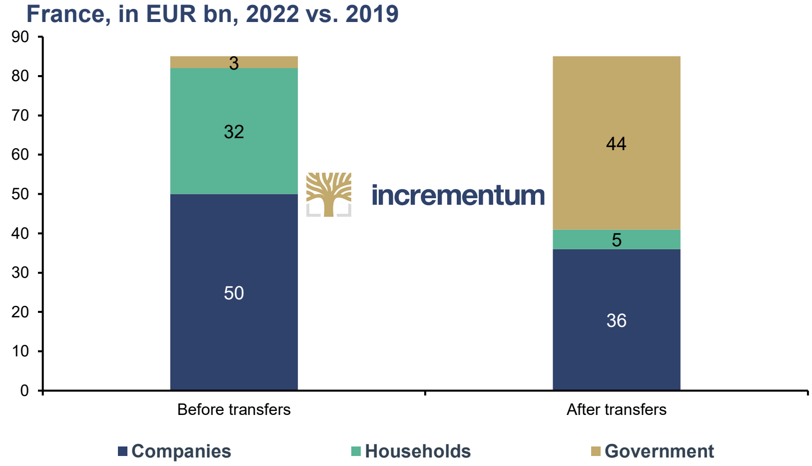
In view of the rather warm winter of 2022/2023, these figures are likely to be lower in the end, possibly even significantly lower. **Nevertheless, it looks as if the governments – and their voters – have lost all fiscal responsibility and prudence.**

Left pocket, right pocket

On the heels of the support programs to cushion the economic turmoil caused by the Covid measures, the sharp rise in energy prices since the summer of 2021 has once again led to significant discretionary support payments that are straining government budgets.

The highly diverse measures (direct financial support to households and companies, price caps, temporary reduction or suspension of taxes and levies on energy sources, assumption of energy costs by the state) have shifted the financial burden significantly, from households and companies to the state.

Real Income Loss of the Sector Due to Energy Price Shock, France, in EUR bn, 2022 vs. 2019



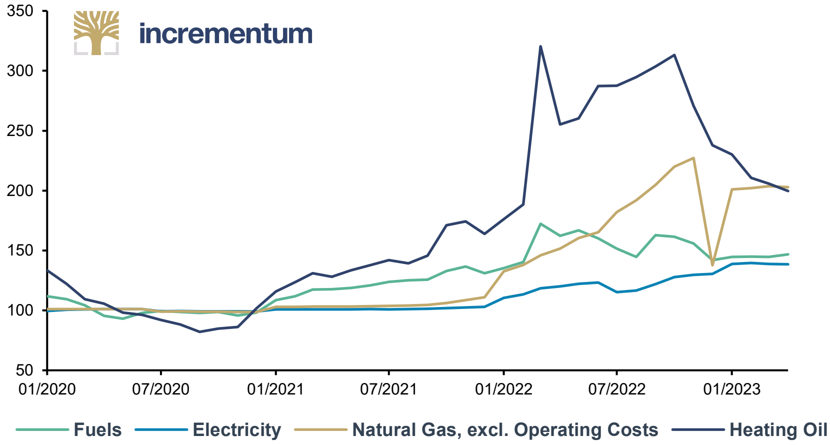
Source: DG Tresor calculations, Clavères (2022), Incrementum AG

But, of course, the economic principle applies: No one can escape this showdown with reality. And so, too, the state can only spend what it has previously taken from private households and companies as a tax or will take from them as a tax in the future. In the end, it will always be the citizens and companies who must bear the prices and thus the costs overall, either through higher taxes or through spending cuts. The interim solution of the state is just that, an interim solution.

I' m sure: Bill Gates or Steve Jobs wouldn't even have gotten permission for a wall socket in a German garage.
Vince Ebert

These measures also have a temporary dampening effect on the inflation rate, namely whenever government intervention reduces prices for consumers. In Germany, for example, there was the 9-Euro Ticket in the summer of 2022, which allowed people to use local public transport for EUR 9 a month. The German Institut für die Wirtschaft calculated that because of this and numerous other government price interventions, the inflation rate was immediately 2 percentage points lower in June 2022, the first month the 9-euro ticket was valid. Administrative prices fell by 4.2% in that month, while all other goods increased by 10.2%. The one-off takeover of the cost of gas and heat by the federal government caused prices for natural gas and district heating to fall by almost 40% for consumers in December 2022, thus putting marked downward pressure on the inflation rate in Germany.

Price Indices for Energy Products, Germany, 100 = 01/2020, 01/2020-04/2023



Source: Statistisches Bundesamt (Destatis), Incrementum AG

Sleight of hand and twist of fate.
U2

These measures are just another political sleight of hand. After all, one year after the expiration of a measure that had a temporary dampening effect on inflation, the inflation rate will be higher by the same amount due to this artificially induced base effect. **Postponed is not canceled.**

High energy prices impact economic growth

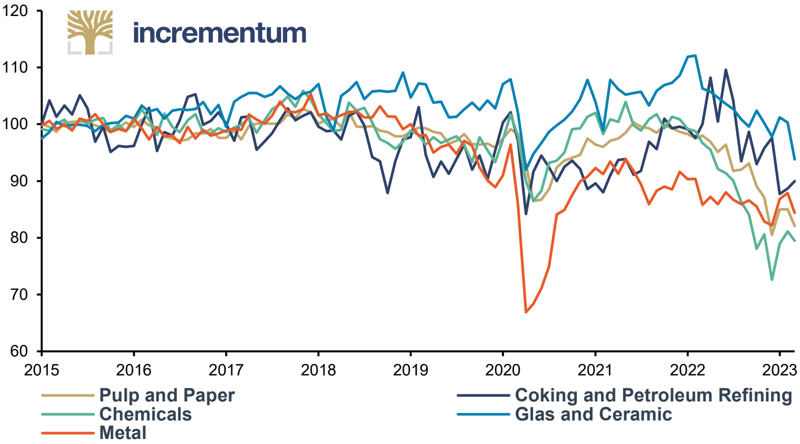
It's not easy being green!
Kermit the Frog

Europe in particular, and especially Germany, is suffering from the rise in energy prices exacerbated by the sanctions and counter-sanctions. However, the politically desired increase in the cost of energy due to the energy turnaround – key words: CO_2 certificates, CO_2 levy and the switch to renewable energies – and its bungled implementation are also making a not insignificant contribution to further worsening this competitive disadvantage. BASF, one of Germany's most important major companies, has announced not only job cuts in Germany but also the closure of several plants. **Explicitly cited as a reason for this decision are the high energy prices.**

This does not just mean short-term upward price surges, but rather an even higher electricity price in the long term, especially in comparison with other locations. The assessment of Bundestag Vice President Katrin Göring-Eckhardt of the

German governing party *Die Grünen* that the price of electricity will fall in the medium term after the nuclear phase-out can only be described as economically daring.

Production Indices of Energy-Intensive Industries, Germany, 01/2015-03/2023



Source: Statistisches Bundesamt (Destatis), Incrementum AG

If Germany were a stock - I would buy it.
Robert Habeck

The following quote from Robert Habeck, economics minister and Green Party colleague, shows how shaky industrial policy is at present. In the fall of 2022, he explicitly pointed out that Germany needed "a bit of luck with the weather" to get through the winter in good shape. In the long run, however, this economic policy based on hope might suffer a major shipwreck.

However, lower growth means lower tax revenues and higher spending on social benefits, even though the structurally very tight labor market – keyword, demographic change – means that unemployment is not expected to rise as in earlier times.

Subsidy competition for *green* technologies: Inflation Reduction Act (IRA)

But what does it say about an enlightened industrialized nation when forms of energy are divided into "good" and "evil," when risks are assessed according to gut feeling rather than on the basis of solid statistics, or when scientific evidence is referred to only when the findings fit the bill?
Vince Ebert

Politicians on both sides of the Atlantic have taken the Ukraine war as an opportunity to push ahead with the green transformation of the economy. Because of the quasi-religious motivation that sometimes prevails, the guiding principle is: whatever the cost. A key element of this transformation is the transition toward sustainable forms of energy. Particular attention is being paid to wind and solar energy. In addition, after heated and controversial discussions, the EU Commission has classified gas and nuclear power plants as climate-friendly.

Fierce subsidy competition to attract companies to this area has broken out specifically between the US and the EU. The trigger for this debt-driven competition was the passage of the US Inflation Reduction Act, which went into effect on August 16, 2022. 86% of the USD 430bn package is earmarked for climate protection and energy security.

As a result, alarm bells began to ring in Brussels. After all, the energy turnaround in Europe is not only supposed to have the goal of reducing CO_2 emissions in energy generation. For the German "traffic light" coalition government, renewables play a particularly central role due to the rejection of nuclear energy and the scarcely available hydropower capacities. Wind energy is to be expanded rapidly. In a political bid to outbid the government, German Chancellor Olaf Scholz has issued the goal – devoid of any anchoring in reality – of putting five new wind turbines into operation every day.

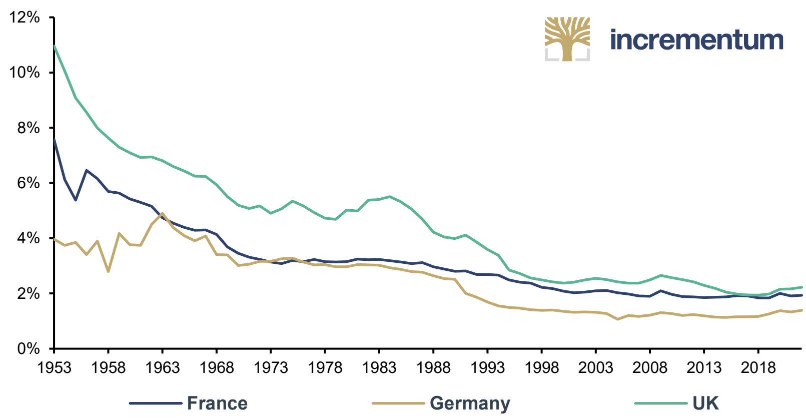
The first three words a child learns today: father, mother, subsidy.
Dr. Hannes Androsch, former minister of finance, SPÖ

Against this backdrop, the EU Commission wants to relax EU rules on public investment and provide more EU funding to promote clean technologies. This is also intended to prevent one dependency, i.e. on Russia, from being exchanged for another dependency, i.e. on China, as a result of the energy transition. After all, China is currently by far the most important producer and processor of raw materials needed for the energy transition.

Cost of military buildup

When the Berlin Wall fell in 1989 and Francis Fukuyama proclaimed the "End of History", the so-called peace dividend was paid out for decades. Defense spending, which had already been in almost constant decline in the preceding decades, slipped once again. From just over 4% to below 2% of GDP in the UK, from 2.5% to just 1.1% (2015) in Germany, and from 2.9% to as low as 1.8% in France. A significant increase is expected to have occurred in 2022.

Military Expenditures, as % of GDP, 1953-2022



Source: SIPRI, Incrementum AG

With the outbreak of the Ukraine war on February 24, 2022, the era of the peace dividend in Europe appears to be coming to an end – and with it the relief it brought to national budgets. At the very least, there are countless declarations to significantly increase defense spending in the future. However, even most NATO countries have so far failed to meet the 2% target they set themselves. Higher defense spending will naturally put a strain on national budgets for a longer period of time, possibly even significantly. Germany, whose defense spending is currently only around 1.3% of GDP, has chosen a special way to achieve this. The decided one-off additional spending on rearmament, amounting to EUR 100bn – roughly twice current defense spending – will not be covered by the ordinary budget. Instead, a further special fund (dt. "Sondervermögen") will be set up in addition to the 27 existing ones. For this special fund, the Basic Law was even amended in June 2022 to exempt it from the constitutionally required debt brake.

However, an increase already seems to be necessary. Senior military officials, for example, criticize that the EUR 100bn will not be enough to achieve the intended goal of strengthening the Bundeswehr's alliance and defense capability. In addition, rising prices and rising interest rates are significantly eroding the purchasing power of the special assets, as this debt must be serviced.

More war means more inflation.
Nouriel Roubini

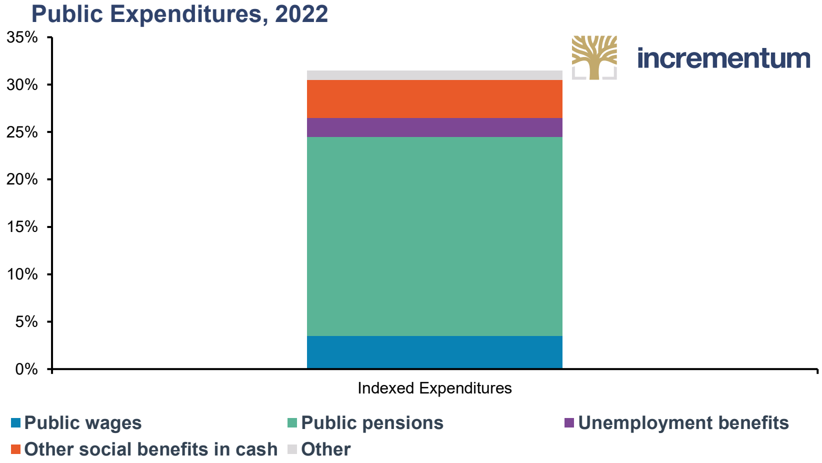
Support payments as well as military and humanitarian in-kind contributions to Ukraine have reached significant levels, as evidenced by the Ukraine Support Tracker **of the Kiel Institute for the World Economy (ifw).** As of February 24, 2023, the first anniversary of the war, Latvia tops the list with assistance amounting to 1.4% of GDP, followed by its two Baltic neighbors Estonia (1.3%) and Lithuania (1.1%). In absolute terms, the US takes the lead with USD 71.3bn. In some countries, however, there is already political resistance to continuing support at this level, in view of the fact that there is no end to the military conflict in sight. In the USA in particular, the Republicans, who won the House of Representatives in the midterm elections of November 2022, are significantly less supportive than the Democrats, a significant factor with regard to passing the budget. The already announced aid for Ukraine' s reconstruction some hopefully not very distant day will put an additional strain on the budget. Pledges abound, but how much money will actually flow once the war is over is another story.

Inflation only relieves the state budget in the short term

Temporary relief is soon followed by a craving for more.
Dalai Lama

In our *In Gold We Trust* report 2022, we pointed out[18] that even a surprise rise in inflation would at best only relieve state budgets in the short term. And that only to the extent that the major spending blocks such as social spending were not already inflation-indexed. The equation that the government can sustainably deleverage itself through high inflation is therefore too simple and even tends to be wrong, because a considerable part of government spending is indexed. For the euro area, the ECB calculates a share of slightly more than 30%.

Automatic Indexation of Public Spending, Euro Area, as % of Public Expenditures, 2022



Source: ECB, Incrementum AG

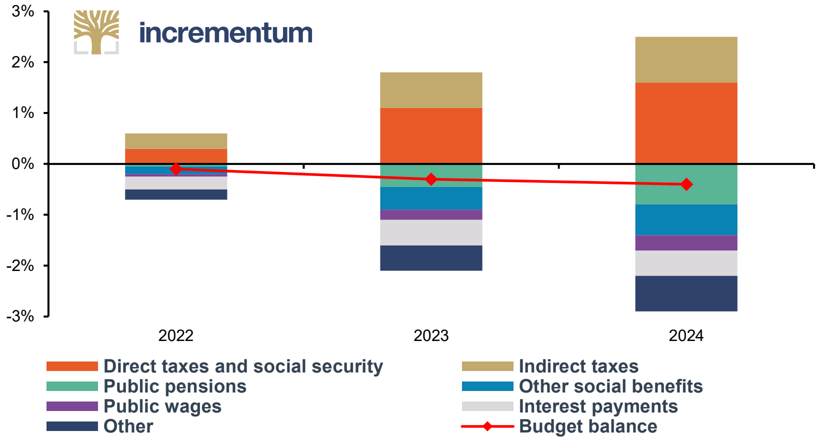
[18] *See* "The Status Quo of Debt Dynamics," *In Gold We Trust* report 2022

Current ECB simulations confirm this. **The strong wave of inflation had hardly any net impact on government budgets in 2022.** It is true that governments benefited from inflation-driven higher tax revenues. This mainly affected those taxes that were progressive and those where price increases were particularly pronounced (energy prices, food).

Father Time catches up with us all.
Steve Nicol

Even if governments responded relatively quickly to the political pressure for support measures, there was still a time lag that tended to work in favor of the finance ministers in 2022, but will no longer do so in 2023. **For 2024, the simulations calculate a deficit 0.5 percentage points higher than in the scenario without an inflation shock.**

Direct Effect of the Inflation Surprise on Budget Balance, Euro Area, as % of GDP, 12/2022



Source: ECB, Incrementum AG

I grew up in France, so I had a good dose of Marx in my education. The first thing Marx teaches you is that revolutions are typically the result of inflation.
Louis-Vincent Gave

Other discretionary expenditures are not legally indexed, but they are certainly political, for instance because of the high proportion of pensioners in the electorate. The massive riots in France in the wake of pension reform are evidence of this. Emanuel Macron even invoked Article 49, paragraph 3 of the French Constitution to push through the pension reform.[19]

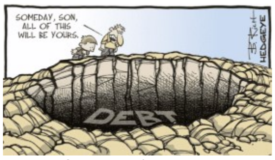
[19] This article states that a law is considered passed even if Parliament does not adopt a motion of no confidence in the government within 24 hours. However, this article can only be invoked for the adoption of the budget and in matters concerning the financing of social security.

Ultimately, whether the government debt ratio will have increased or been reduced at the end of this highly inflationary phase depends on policymakers. It can at least be said with certainty that a significant reduction in the public debt ratio is not to be expected. And should a reduction succeed, it will naturally be the citizens who finance this debt reduction through higher tax payments or lower real transfer payments.

Conclusion

Empires always have the hubris to think they are indestructible, when in fact they are always unsustainable.
Marianne Williamson

The call for more sustainability has been heard for many years, if not decades. All our lifestyles should become more sustainable, and warnings about the possible catastrophic consequences of climate change are particularly loud at the moment. If one enters *sustainability* at Google, the search engine delivers over 2.4 billion results. Beyoncé and Donald Trump together don't even manage a quarter of that. In contrast, when it comes to debt – especially national debt – the issue of sustainability has played no role at all since the Covid pandemic. "Whatever it takes" – this unfortunate phrase from Mario Draghi is the new reality. The energy and inflation crisis that immediately followed the pandemic has turned this unfortunate maxim into a political top seller.



Courtesy of Hedgeye

This imbalance should be reason enough to look at what sustainability actually means. The best-known definition comes from the United Nations World Commission on Environment and Development's report *Our Common Future* in 1987, also known as the Brundtland Report. According to this definition, development satisfies the criterion of sustainability if it "meets the needs of the present without compromising the ability of future generations to meet their own needs". **This universally shared definition of sustainability relies heavily on inter-generational equity.**

Blessed are the young, for they shall inherit the national debt.
Herbert Hoover

It is precisely this intergenerational equity that is jeopardized by government debt. As we have pointed out in previous years, the official, explicit government debt figures suffer from the fact that they do not take into account claims from payments into social security systems and other legally securitized future claims, the so-called implicit debt. For most countries, this results in a – sometimes dramatic – underestimation of the debt burden. The sum of explicit and implicit debt, significantly referred to as the sustainability gap, amounted to 398.9% for Germany as of fall 2022. Only 68.7% is explicitly reported – and the Maastricht criteria apply only to this roughly 17.5% of total debt. The effects of the Covid measures are also dramatic. These have more than doubled the implicit debt. Overall, the pandemic measures have increased implicit debt by 179.6 percentage points. To pay off this debt, either revenues would have to be increased by 16% or expenditures would have to be reduced by 13.8%. Both seem politically impossible.

For the US, implicit debt at the federal level for social spending and Medicare is estimated at around 400% of GDP (2021). Mind you, this is in addition to explicit debt of around 120% of GDP.

What is known can't jerk us around unwittingly. Before anything can be resolved, the implicit must be made into the explicit.
Ryan Holiday

Implicit debt will be a major concern for governments in the coming years due to the demographic changes now taking full effect on the labor market. In the case of explicit debt, the significant increases in interest rates are already having an immediate impact on the preparation of every budget. **The sharp rise in interest rates has thus set the stage for a showdown**.

After all, the lowering of interest rates has prevented a major debt crisis for decades, apart from the turmoil in Greece at the beginning of the 2010s. However, ultralow interest rates did not solve the debt problem but only postponed it into the future and made it worse. After all, the low interest rates invited people to take on even more debt under the more favorable conditions.

We're caught in a trap
I can't walk out
Because I love you too much, baby. Why can't you see
What you're doing to me
When you don't believe a word I say?
Elvis Presley

At the same time, the central banks have maneuvered themselves into the zero interest trap **by fighting the symptoms with interest rate cuts – and with their eyes open.** After all, anyone who encourages debt creation by depressing interest rates need not be surprised if governments, companies, and private households plunge into ever higher debt. Moreover, there were plenty who admonished and issued warnings against this policy of fighting symptoms and avoiding pain. But they were not listened to.

The idea that an economy can grow out of debt has always been dubious and was not refuted by developments in 2021 and 2022. The – in fact merely temporary – decline in government debt ratios was largely due to the base effect resulting from the gradual opening of the economy during and especially after the Covid pandemic. An objective, sober view will classify this special effect as just that, just as the current wave of inflation, is a second, almost simultaneous special effect, which provides only short-term relief for public budgets.

The following comparison of the additional financial burden per percentage point of interest rate increase is extremely revealing.

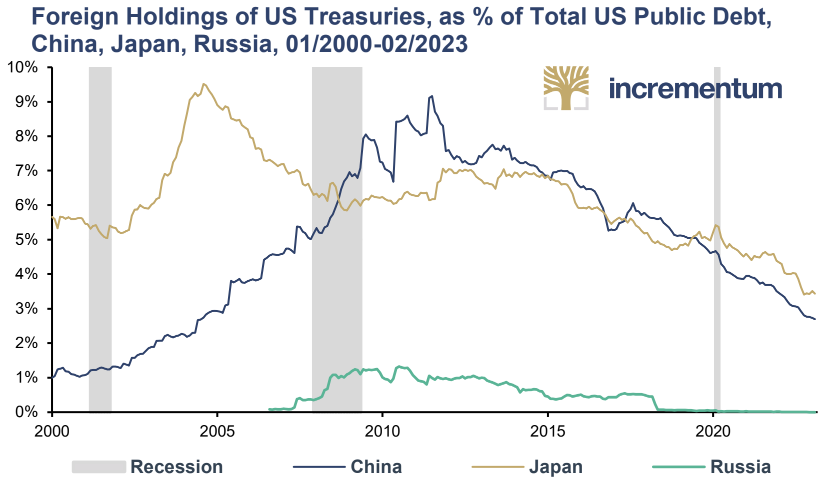
Extra Interest Expense Per 1% Higher Interest Rates

Type	2023 (in USD bn)	as % of GDP	2000 (USD bn)	as % of GDP
Federal	316	1.20%	57	0.22%
States	12	0.05%	6	0.02%
Local Municipalities	23	0.09%	9	0.03%
Private Households	244	0.93%	78	0.30%
Non.-Fin. Corporations	128	0.49%	47	0.18%
Total	**723**	**2.76%**	**198**	**0.75%**

Source: Real Investment Advice, Incrementum AG

It shows two things. On the one hand, it demonstrates how strongly debt has increased over the past two decades; on the other hand, it makes clear why central banks ultimately have their hands tied to a permanently higher interest rate level, provided they do not want to trigger a veritable debt crisis. The fact that the *absolute* additional burden is relatively low by historical standards does not help much. It is the *relative* additional burden resulting from the sharp rise in interest rates that will have a significant economic impact in itself, and has already done so.

The current showdown in geopolitics is likely to have impact on bond yields. Why should states, which are increasingly hostile to the West with the USA at the forefront, maintain or even expand their portfolio of government bonds? Ultimately, this would support countries in their armament efforts through lower interest burdens, even though the armament is explicitly directed against oneself.



Source: Reuters Eikon, Incrementum AG

The fragile wants tranquility, the antifragile grows from disorder, and the robust doesn't care. Debt always fragilizes economic systems.
Nassim Taleb

A profound debt crisis can therefore only be avoided at the price of a continuation of the low interest rate policy and the associated substantial inflation potential. If, however, unlike in the past two decades, the markets were to form higher inflation expectations, this would increase the inflation premium for bonds and loans of all kinds, thus rendering the loose monetary policy futile. **The showdown between these two economic adjustment scenarios is already in full swing.**