

Steno Signals

with Andreas Steno

Steno Research

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The yield curve inverts again... Should we care?

The swap curve has inverted, the Treasury curve is close behind, and the flattening came from the WRONG end after the Fed hike. The textbook cycle-killer... yet equities keep making highs. Most of us learned our curve reflexes in a 40-year bond bull market, so this week I ran the history instead: what FX, rates, commodities, and equities did around the eight inversions since 1978, how long markets took to dislike it (4 months to the peak, 2 years to the trough), and why the new bond regime says respect the lags.

Happy Monday and welcome to our weekly flagship editorial!

Today, I am going to address three questions that keep coming up in client calls, in my inbox and, admittedly, in my own head. These are the key questions I will address, and I will summarize both the pros and cons of each viewpoint, including my own bottom line:

Is the yield curve actually inverting again, and does the bear-flattening we have seen since the Fed hike matter?

What has ACTUALLY happened in FX, rates, commodities, and equities before and after an inversion, and how long does it take before markets dislike it?

Should we care this time, given that the bond regime has flipped, and what does it mean for the book?

Follow along below.

Let me start with the puzzle that most people struggle with. Bond yields are high, they trend higher, the long end has been printing yields we last saw before Lehman, and the Fed has now hiked on top of it. Every textbook you own says that equities should hate this. And yet the S&P 500 and the Nasdaq sit close to their highs, the Nikkei has had its best run in decades, and the AI capex cycle rolls on like nothing happened.

I think the explanation is simpler and more uncomfortable than most care to admit. Almost everyone in this business, myself included, grew up in an environment of FALLING bond yields. My entire career in banking, from junior FX analyst to Global Chief Strategist, was spent in a structural bond bull market. The reflexes I learned there, and that most of you learned alongside me, were formed in a regime where lower yields were the norm, higher yields were the exception, and a flat curve meant the end was nigh.

That should make all of us careful with historical analogies. Not dismissive of them... careful. A framework is only as good as the regime it was estimated in, and the regime flipped in March 2022 when the 40-year downtrend in yields broke. If the bond market is now in a structural bear market, driven by persistent fiscal expansion, higher inflation volatility, and term premia that are finally allowed to exist, then some of the “vanilla” conclusions on what a flat or inverted curve means may need a rethink, even if the chart pattern looks identical to 2000 or 2006.

So I decided to do the boring thing. Instead of arguing about the analogy, I ran the numbers on every inversion since 1978 and looked at what markets actually did before and after. The full study is in Theme 2.

Theme 1: Is the yield curve actually inverting again, and does the bear-flattening matter?

The honest answer is “one of them has”. The 10yr-2yr Treasury curve started the year at roughly 70bps and has flattened relentlessly... It is NOT inverted, but it is close enough that the debate is on. The chart below is the long history, and it is worth staring at for a second, because six of the eight episodes on it happened in a bond bull market.

Chart 1: The Treasury curve is a whisker from zero... and most of the history is from a different bond regime

10yr-2yr US Treasury yields %



Source: Steno Research, Bloomberg and Macrobond

The OIS swap curve, which strips out the Treasury supply noise, the buyback wizardry, and the term premium debate, IS back at zero and has traded below it. That is the curve that tells you what the market thinks the Fed will do relative to where it is, and it says: the hikes we got are close to the hikes we will get. That is not a market pricing an aggressive tightening campaign, but instead a market pricing a Fed that has done most of its work (including what is in the 2yr price already).

Chart 2: The swap curve has ALREADY inverted... the market thinks the Fed is close to done

10yr-2yr OIS Swap rate in USDs



Source: Steno Research, Bloomberg and Macrobond

Here is the part that matters more than the level. The flattening since the Sept 16 hike has come from the FRONT end. The 2yr moved up with Warsh, the 10yr moved less, and the curve compressed by 15-20bps in a week. That is a bear-flattener, and as regular readers will know from my curve regimes explainer, the bear-flattener is dead last in my ranking of the four curve regimes for the business cycle. It is the shape that inverted us into every recession you remember.

Why is it the worst? Because it starves the credit engine from both ends at once. A commercial bank borrows short and lends long... that is the entire magic trick. A bear-flattener raises the cost of the short leg while the long leg stops paying.

Steepeners feed maturity transformation, flatteners starve it, and a flattener led by the SHORT end is the version where policy is actively doing the starving. The sketch below is the one I suggested you tape to your screen. Keep it there.

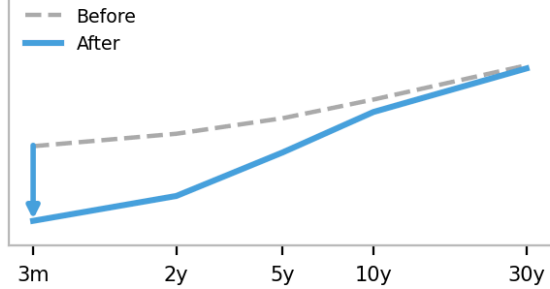
Chart 3: The four yield-curve regimes, ranked... and we just spent a week in the WORST one

The four yield-curve regimes, ranked for the business cycle

Steepeners feed the credit engine.. flatteners starve it

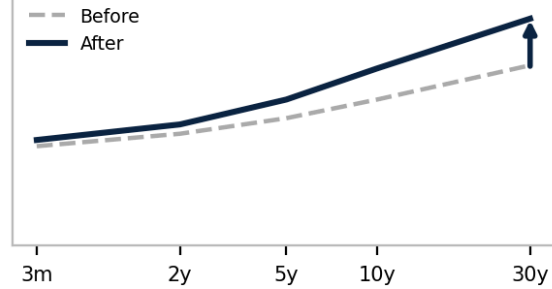
#1 BULL STEEPENER

Short end drops, curve steepens.. the Trump/Bessent dream



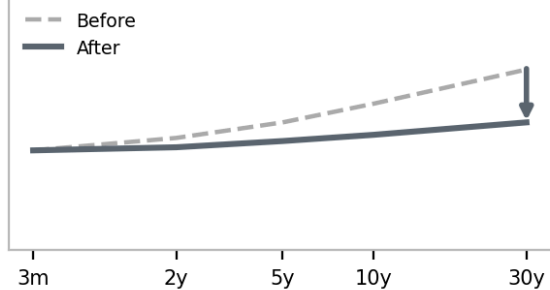
#2 BEAR STEEPENER

Long end up more than short.. the bank engine still runs



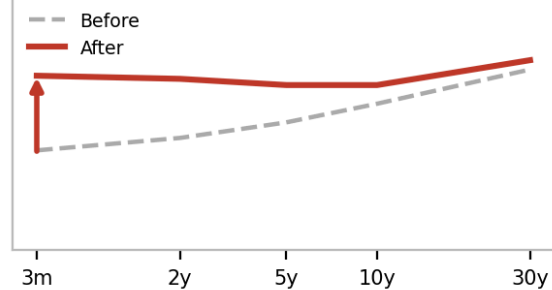
#3 BULL FLATTENER

Term premia compress, long end drops.. scarce-asset heaven



#4 BEAR FLATTENER

Short end up more than long.. the cycle KILLER



Source: Steno Research

The cheat sheet on the asset impact is equally relevant this week.

In a bear-flattener, both the credit-cycle assets (banks, industrials and, nowadays, Tech, which has become the single biggest capex sector on the planet and behaves like an industrial) and the scarce assets (Gold, Bitcoin) tend to underperform. Nothing steepens, and nothing compresses. That is the theoretical case for worrying. Now for the counterweights, because there are two big ones.

Chart 4: Curve regimes and the asset impact... the bear-flattener pays **NOBODY**

Curve regimes and the asset impact.. the cheat sheet

Steepeners pay the credit-cycle assets.. compression pays the scarce assets

	Tech & real-economy cyclicals (banks, industrials)	Scarce assets (Gold, Bitcoin)	The business cycle
#1 Bull steepener (short end down)	OUTPERFORMS (credit + rate relief)	OUTPERFORMS (rates compress)	Runs HOT
#2 Bear steepener (long end up)	OUTPERFORMS (credit engine runs)	Lags Tech (no compression)	Runs fine
#3 Bull flattener (term premia down)	Underperforms (capex cycle starved)	OUTPERFORMS (real rates down)	Slowing
#4 Bear flattener (short end up)	Underperforms	Underperforms	The killer

Source: Steno Research

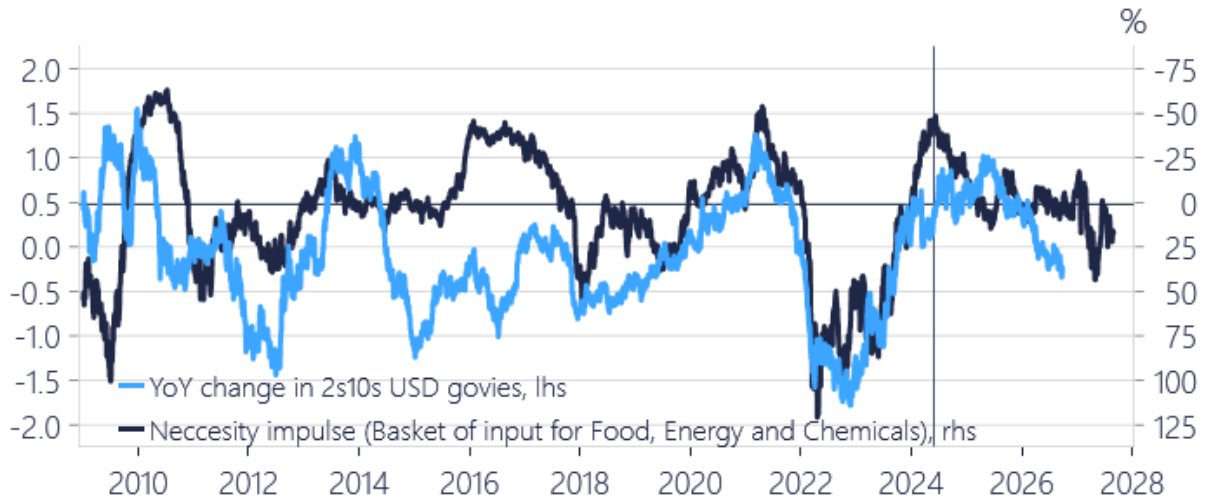
The first counterweight is WHY we are flattening. This is not the Fed responding to a broad-based overheating. It is the Fed responding to a Hormuz-driven input-cost shock in food, energy, and chemicals... what we call the necessity impulse.

And that impulse has already dropped by roughly half from its peak, which historically points to a flattener that is SHORT-LIVED rather than the start of a 2006-style grind. The curve follows the cost basket with a lag, and the cost basket has turned or at least not worsened materially (since the peak inflation seen in April this year).

Chart 5: The impulse from the cost basket points at a SHORT-LIVED curve flattener

The impulse from the cost basket points at a short-lived curve flattener

Input costs for food, energy and chemicals have dropped dramatically (50%)



Source: Steno Research, Bloomberg and Macrobond

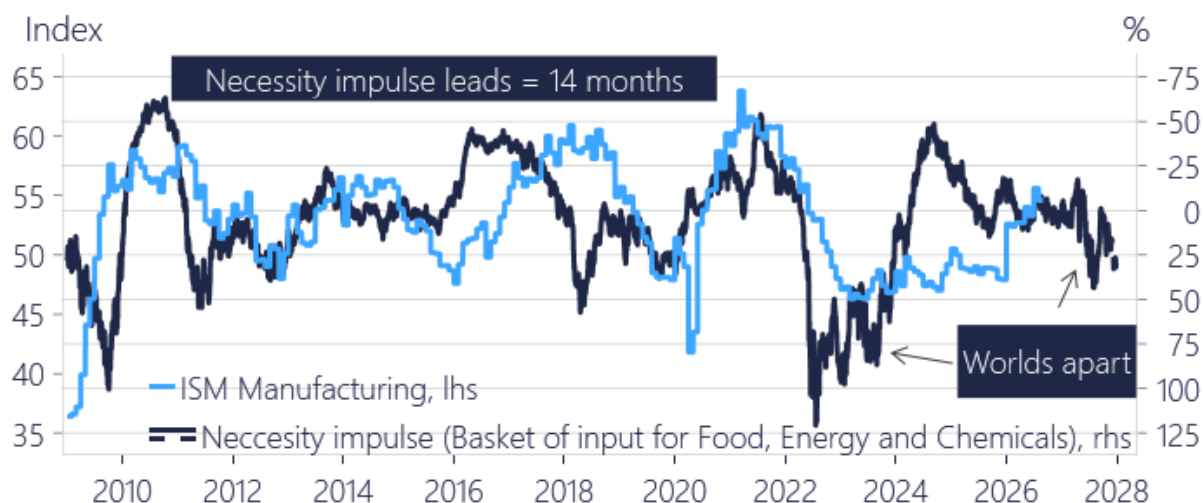
The second counterweight is size. The 2022 input-cost crisis was 2-3x as severe as this one, and yet the necessity impulse still leads the ISM by roughly 14 months. Look at where the impulse is today versus where the ISM is: worlds apart. If the lead holds, the manufacturing cycle does not roll over on this shock, but rather just wobbles in 2027.

That is a very different starting point from 2000 (Fed at 6.5% into a capex bust) or 2006 (a global coordinated tightening campaign that ran all the way into Lehman).

Chart 6: The input cost crisis of 2022 was 2-3x as severe as this one... and the ISM is worlds apart from it

The input cost crisis of 2022 was 2-3x as severe as this one

Input costs for food, energy and chemicals have increased again (>25%)



Source: Steno Research, Bloomberg and Macrobond

The bottom line on Theme 1 is that the market is right to notice the shape and wrong to panic about the level. A bear-flattener is the worst regime, full stop, but it is a regime we have visited for a few WEEKS on the back of a cost shock that is already fading, not one we have lived in for a year. Whether that distinction matters is exactly what the history should tell us. So let us look at it properly.

Theme 2: What has ACTUALLY happened in markets before and after an inversion?

I took the 10yr-2yr Treasury curve back to 1976 and defined an inversion as the FIRST close below zero after at least four months above it, with a minimum of 18 months between episodes so that the 1981-82 and 2006-07 re-inversions do not get counted five times. That gives eight episodes: Aug 1978, Sep 1980, Dec 1988, May 1998, Feb 2000, Dec 2005, Aug 2019 and Apr 2022.

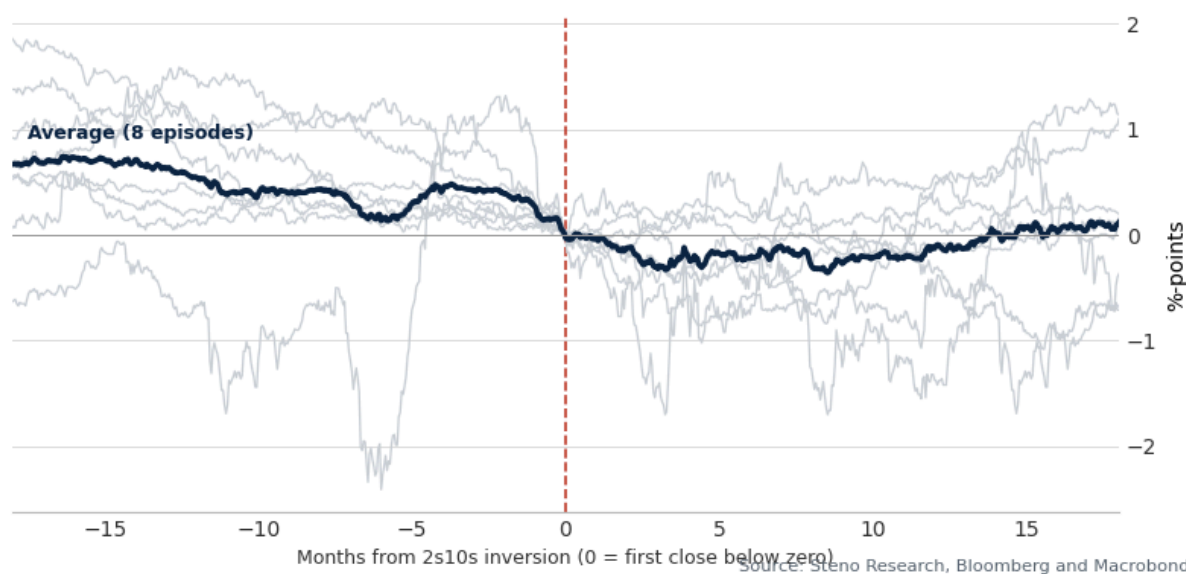
Every market series is rebased to 100 on the inversion day and shown for 18 months on either side (36 months forward for equities, because that is where the bodies are buried). Where a series is shorter than 1978, the number of episodes is stated on the chart. S&P sectors only cover the last five, while an equal-weight average of MSCI World Value and Growth serves as a world equity proxy for all eight.

First, the curve itself. The thing to notice is that the first inversion is NOT the low. On average, the curve keeps flattening for roughly a year after the first close below zero, bottoms 40-50bps inverted, and only starts re-steepening 12-15 months later. The first inversion is the starting gun, not the finish line, and almost every episode in grey confirms it.

Chart 7: The curve keeps FLATTENING for ~a year after the first inversion

The curve keeps FLATTENING for ~a year after the first inversion..

US 2s10s spread around the 8 first-inversion dates since 1976 (grey = individual episodes, navy = average)

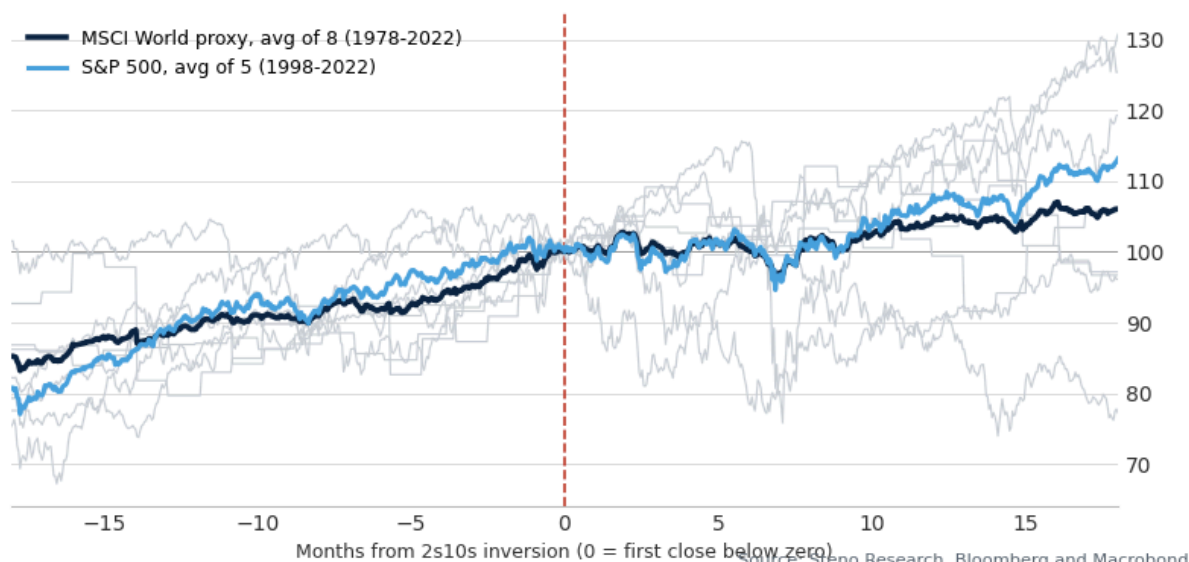


Now equities, and this is the chart that should calm the nerves of the “yield curve = sell” crowd. Equities do not sell off on the inversion. They arrive at it having rallied 11-13% over the prior twelve months; they go SIDEWAYS for six months (S&P 500 +1%, MSCI World +0.2%), and twelve months later they are still up 5-8% on average. Six of the eight episodes are positive a year out. Selling the day the curve inverts has, on average, cost you money.

Chart 8: Equities do NOT sell off on the inversion... they go **SIDEWAYS** for six months

Equities do NOT sell off on the inversion.. they go **SIDEWAYS**

Rebased to 100 at inversion date, ±18 months (grey = individual MSCI World episodes)

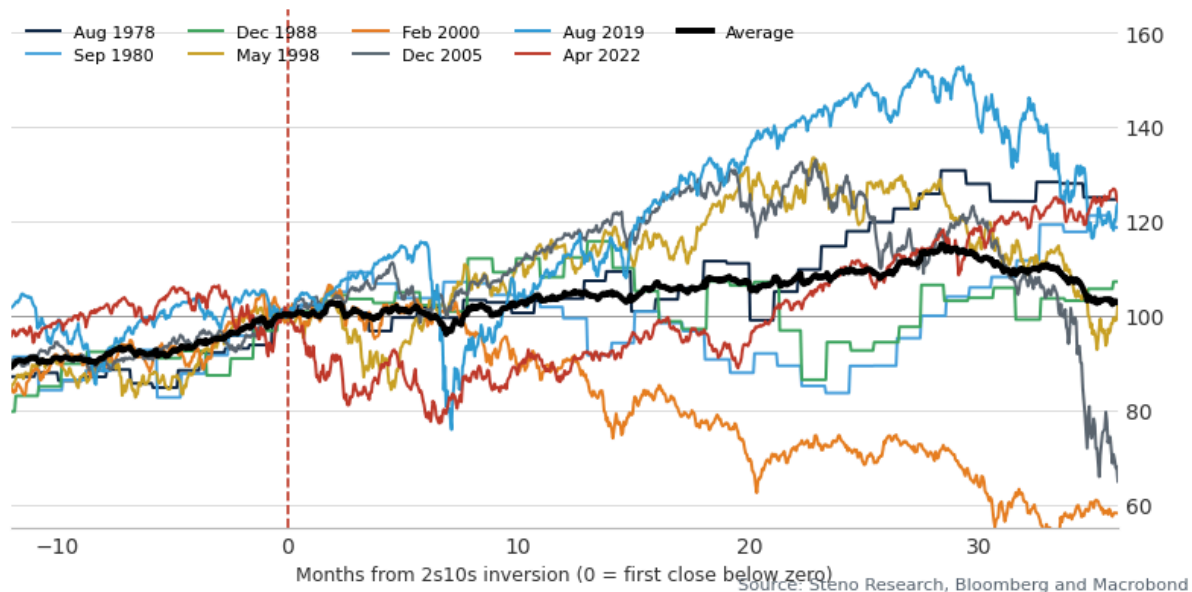


The problem is what comes after the sideways patch. When you extend the window to three years, the average path peaks around 12-15 months after the inversion and rolls over from there, and the dispersion is enormous. 2000 and 2022 topped essentially on the inversion date. 1988 and 2005 kept rallying for 14-23 months and then lost 25% and 51%, respectively. 1978 never produced a 15% drawdown at all. The average hides everything, so look at the individual lines.

Chart 9: The REAL pain typically arrives 1-2 years after the inversion... but the dispersion is enormous

The REAL pain typically arrives 1-2 years after the inversion

MSCI World proxy rebased to 100 at inversion, -12 to +36 months, each episode



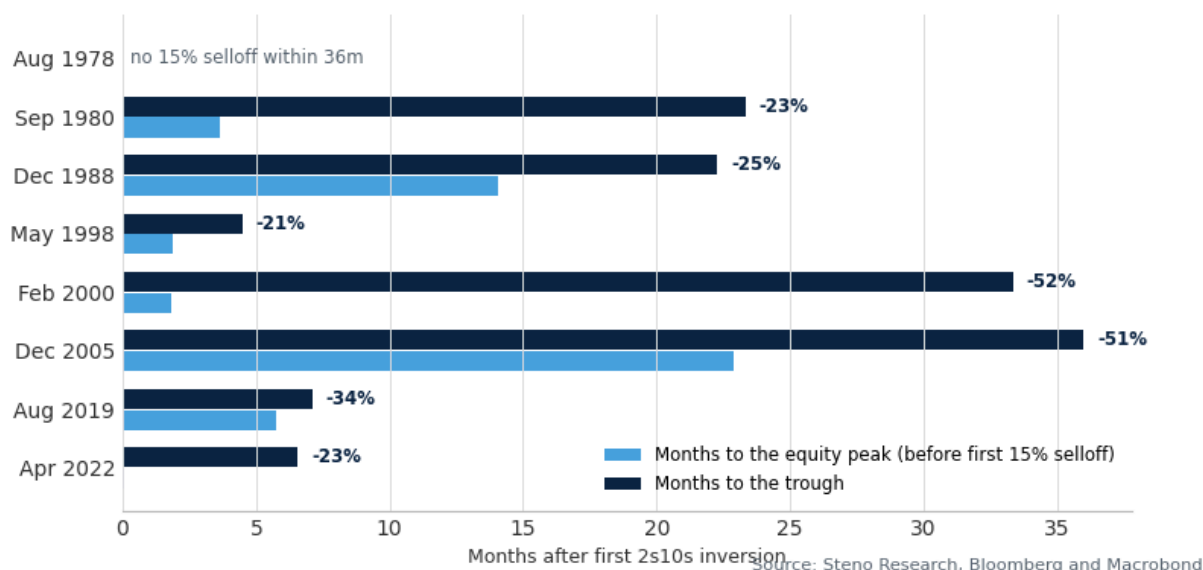
So how long does it take before markets dislike it?

I measured it three ways per episode: months to the equity peak that precedes the first 15% selloff, months until that 15% selloff is actually hit, and months to the trough. The medians are 4 months to the peak, 9 months until the 15% drawdown is registered, and 22 months to the trough. But the range on the first number is 0 to 23 months, which is a polite way of saying the inversion tells you a lot about the direction of the next two years and almost nothing about the timing of the next two quarters.

Chart 10: 4 months to the peak, 2 YEARS to the trough... and a range of 0-23 months on the peak

~4 months to the peak, ~2 YEARS to the trough.. huge dispersion

MSCI World proxy: months from inversion to peak / trough, peak-to-trough % labelled



The summary table below pulls the whole cross-asset picture together, and I would encourage you to print it next to the regime sketch. Three things jump out. First, the pre-inversion year is a party for almost everything: momentum, tech, commodities, all up double digits - and remember that we have not inverted YET and remain some 30 bps from it (measured in Treasury yields: 10yr-2yr bond yields)...

Second, the six months AFTER are close to flat across the board with the exception of the dollar. Third, the 12-18 month horizon is where assets diverge: equities and gold recover, bonds outside the US and the risk currencies do not.

Chart 11: What happens around a 2s10s inversion... the summary table across FX, rates, commodities and equities

What happens around a 2s10s inversion.. average % moves, 8 episodes since 1978

Avg % change per window. Bond futures = price (up = lower yields). Green > +1%, red < -1%. Hit % = share of episodes up 12m after. Max DD = avg worst drawdown 18m post

Asset	N	-12m→0	-6m→0	0→+3m	0→+6m	0→+12m	0→+18m	Hit % +12m	Max DD post
S&P 500 (SPY)	5	+11.3	+6.4	-0.1	+1.2	+8.0	+13.1	60%	-16.0
MSCI World proxy	8	+12.9	+9.1	+0.8	+0.2	+4.9	+6.1	62%	-13.1
MSCI World Quality	6	+14.4	+7.9	+1.6	+3.9	+13.1	+17.2	67%	-12.2
MSCI World Momentum	8	+26.6	+15.9	+3.4	+0.1	+4.5	+10.1	75%	-14.1
Value / Growth ratio	8	-2.0	-3.0	+0.6	+0.7	+2.5	+2.6	75%	-8.3
S&P Tech	5	+22.8	+15.0	+3.2	+5.9	+18.0	+29.5	60%	-23.7
S&P Financials	5	+8.7	+3.7	-0.7	+1.2	+6.2	+11.0	60%	-19.4
S&P Materials	5	+6.1	+4.9	-5.5	-8.9	+0.9	+9.0	60%	-22.2
S&P Staples	5	+5.2	+3.7	-2.9	+1.1	+5.0	+3.7	80%	-14.2
US 10y future (TY)	6	-0.7	-0.5	-0.8	+0.2	+2.9	+0.1	67%	-4.3
Bund future (RX)	5	+0.5	+0.1	-1.7	-2.5	-1.7	-5.1	40%	-7.6
Gilt future (G)	6	+2.0	+2.5	-0.5	-2.9	-1.8	-6.8	50%	-9.8
USD basket	8	+1.6	+0.4	+3.3	+4.5	+4.0	+4.6	62%	-3.7
USDJPY	8	-0.3	-3.3	+3.1	+3.5	+5.7	+9.4	88%	-6.6
EURUSD	8	-3.9	-1.0	-3.2	-3.8	-2.2	-1.7	38%	-10.9
AUDUSD	8	-0.6	-0.5	-3.6	-3.8	-1.8	-2.9	38%	-12.1
Gold	8	+19.2	+11.5	-4.3	-2.5	+4.6	+24.2	50%	-14.4
Silver	8	+12.8	+4.8	-3.4	-3.8	+12.6	+71.4	50%	-22.0
Copper	6	+13.4	+9.0	-1.5	-0.7	+1.3	+7.4	50%	-20.5
Brent	6	+38.9	+3.9	+4.6	+2.0	+0.6	+13.4	67%	-26.1

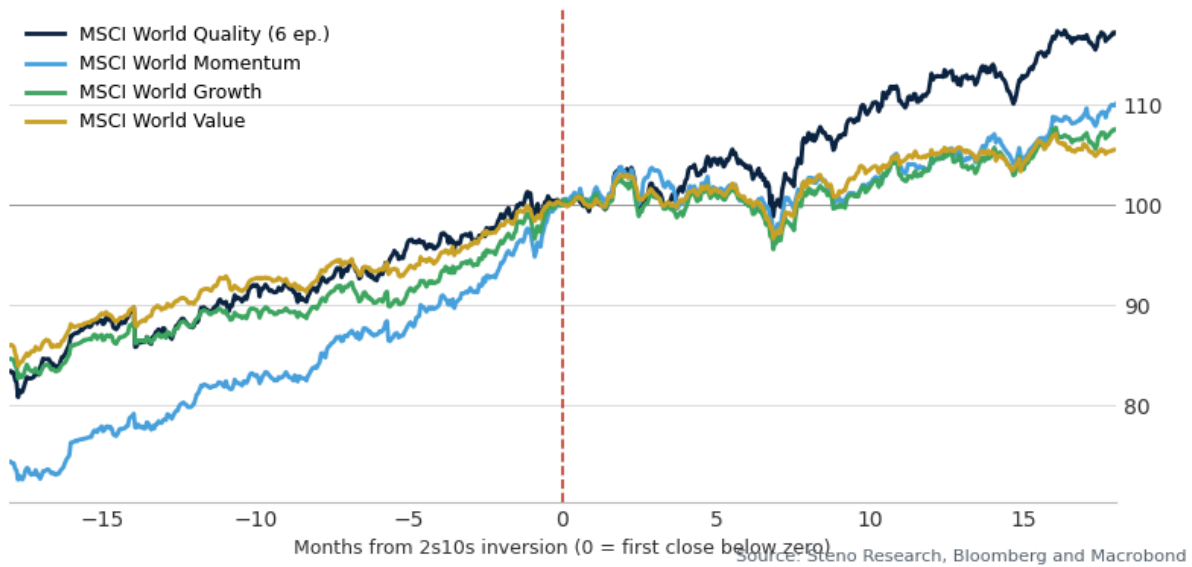
Source: Steno Research, Bloomberg and Macrobond

Inside equities, the style story is clean. Momentum runs HARD into the inversion (+27% in the prior twelve months) and then stalls flat for six months. Quality is the factor that holds up best on the other side (+4% at six months, +13% at twelve), while Value and Growth track each other closely. If you take one equity conclusion from the study, it is this: rotate from Momentum into Quality when the curve inverts, and do not bother with the Value-versus-Growth debate; it is a coin flip.

Chart 12: Momentum runs HARD into the inversion... Quality holds up best on the other side

Momentum runs HARD into the inversion.. Quality holds up best

Average path rebased to 100 at inversion, ±18 months



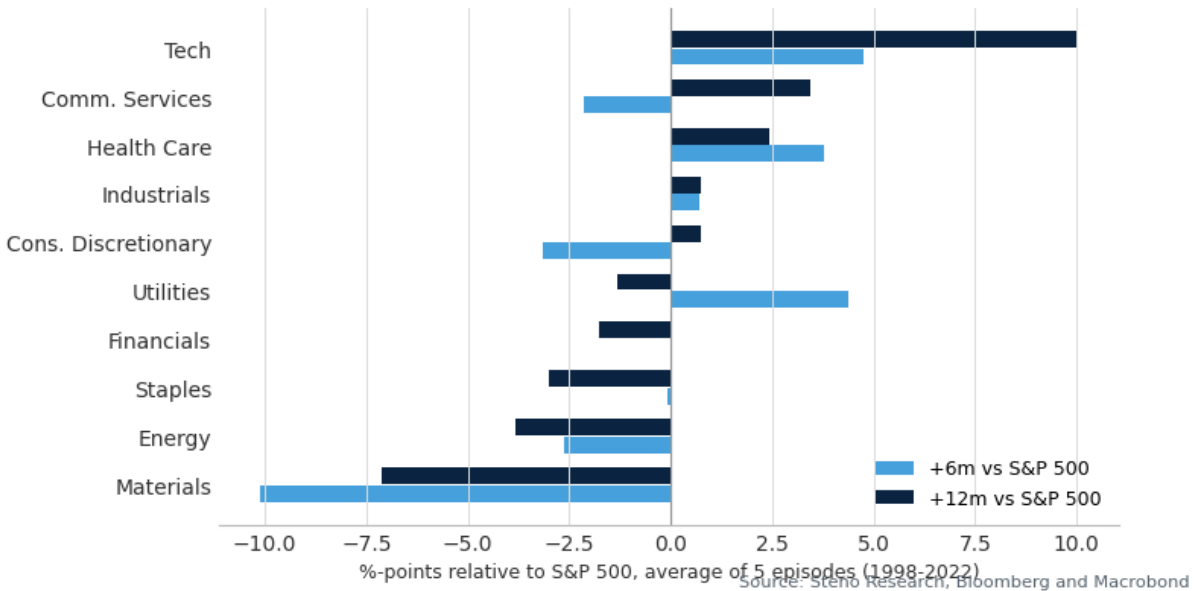
The sector version, admittedly on five episodes only, rhymes with the regime sketch. Materials get hammered relative to the S&P 500 (-9 percentage points at six months), Energy and Staples lag, while Tech and Health Care outperform at both six and twelve months.

Tech outperforming after an inversion will surprise those who still think of it as a duration asset. It is not. It is the sector with the earnings, and earnings are what you want when the cycle is uncertain.

Chart 13: Tech and Health Care outperform after the inversion... Materials get HAMMERED

Tech and Health Care outperform.. Materials get HAMMERED

S&P 500 GICS sectors, average relative return after the inversion date

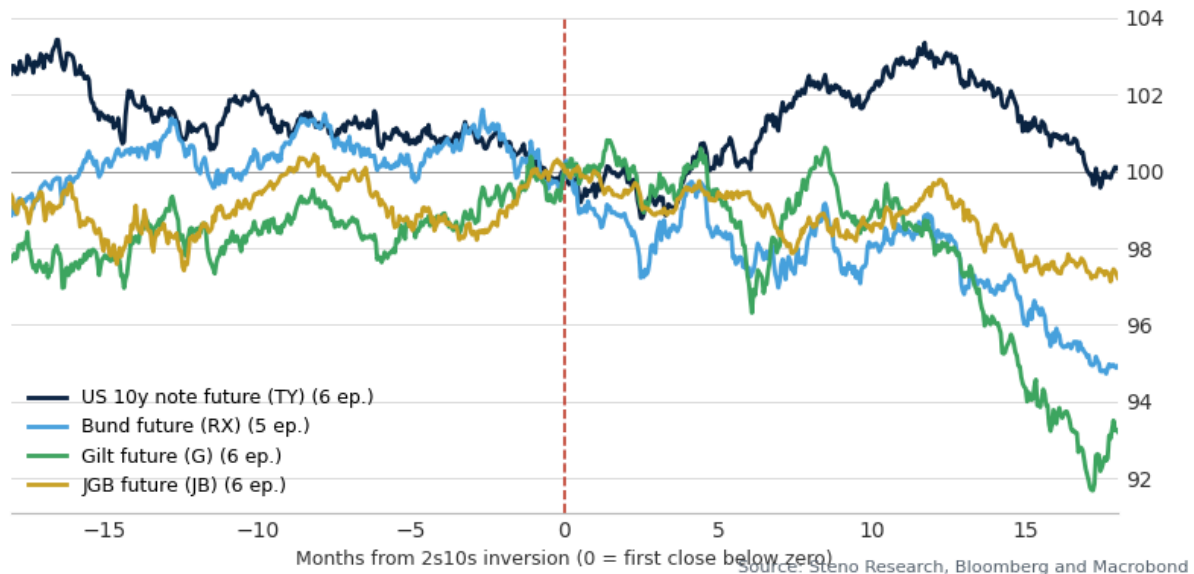


Rates are the surprise for most. Bond futures do NOT rally on the inversion. The US 10yr future is flat six months out, up 3% at twelve months, and then fades. Bunds and Gilts are DOWN 5-7% eighteen months after a US inversion (The EUR rates cycle typically lags that of the Fed, but I consider that more debatable this time around). The inversion is a front-end story: the 2yr does the work, the long end does not reward you for being early, and in the current regime, where term premia are allowed to exist, I would expect it to reward you even less. Would I buy the long bond here? Still no.

Chart 14: Bonds do NOT rally on the inversion... the front end does the work, the long end fades

Bonds do NOT rally on the inversion.. the front-end does the work

Generic 1st bond futures (price, contract-coupon breaks removed), avg path rebased to 100 at inversion, $\pm 18m$



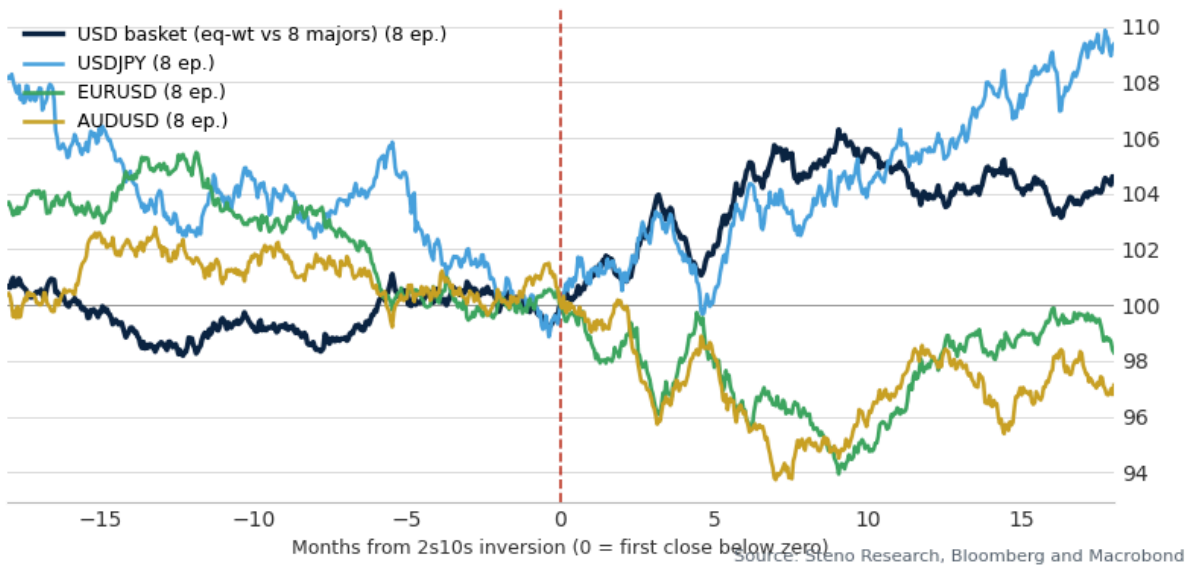
FX is the cleanest signal in the entire study, and it is not close. The dollar rallies 3-5% on an equal-weight basket in the three to six months AFTER the inversion, USDJPY is higher twelve months out in seven of eight episodes, and EUR and AUD lose 3-4% against the greenback.

It is the USD smile from my Nordea days doing what it does: when the US front end prices the end of a hiking cycle while the rest of the world is still catching up, the dollar gets bid in the middle of the smile before it gets bid on the risk-off wing.

Chart 15: The USD is the cleanest signal... +3-5% in the six months AFTER the inversion

The USD is the cleanest signal.. +3-5% in the 6 months AFTER

Average path rebased to 100 at inversion, ±18 months. Basket = USD vs JPY, GBP, CHF, CAD, AUD, NZD, SEK, NOK

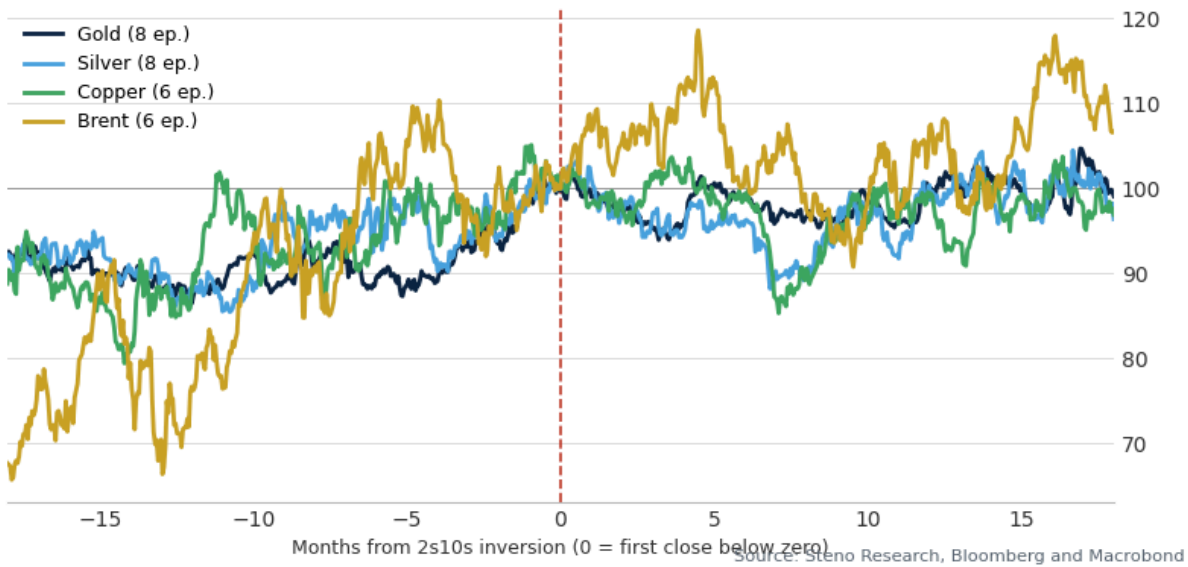


Commodities peak INTO the inversion, not after it. Brent is up 39% and gold 19% in the twelve months before, which is exactly the cost-push dynamic that gets the central bank to flatten the curve in the first place. They then wobble for three to six months (gold -4%, silver -3%, copper -2%), before gold reasserts itself as the winner at the 18-month horizon. I used medians here because the 1979-80 silver corner would otherwise make the averages look like a Hunt brothers marketing brochure.

Chart 16: Commodities peak INTO the inversion... gold wobbles for six months, then WINS

Commodities peak INTO the inversion.. gold wobbles, then WINS

Median path rebased to 100 at inversion, ± 18 months (median used: 1979-80 silver/gold spike distorts averages)



The bottom line on Theme 2 is that the inversion is a lousy timing signal for equities and a decent one for the dollar. Assets do not dislike the inversion on day one. They dislike the twelve months of flattening that follow it, and they dislike them with a lag of anywhere between one and 24 months, clustering around 6-9. The tradable bits are the USD, Quality over Momentum, and staying away from the long bond... NOT the equity short... But again, remember that we have NOT yet inverted, and the preceding 12 months until the inversion is typically a party!

Theme 3: Should we care this time, and what does it mean for the book?

Now back to the regime. Everything in Theme 2 was estimated in a bond bull market. That does not make it useless, but it changes which parts of it I trust. The mechanical parts (that a bear-flattener starves bank credit creation and that the front end leads) are regime-independent. The transmission parts, that a flat curve reliably chokes the private credit cycle within a year, are not, and here the evidence since COVID is that the script has flipped.

We have been banging the drum on this for months: the private credit cycle in the US is running one of the widest spreads to its long-term trend in 10-20 years, and it accelerated while long-end yields rose and while the war in Iran dragged on. Japan is the cleanest case study. Release a suppressed curve, let term premia breathe, and the banking system does not just cope; it starts intermediating credit again, and the Nikkei has its best decade in a

generation. A curve that is steep because the long end is allowed to be a market is a DIFFERENT animal from a curve that is steep because the Fed cut to zero.

That is why the bear-flattening matters more to me than the inversion itself. A steep curve for adverse reasons still feeds the engine. A flat curve for policy reasons starves it. But, and this is where leads and lags need to be respected even if the curve environment has changed, the engine does not stall the week the shape changes. Central bank decisions take 8-10 months to hit the economy; the necessity impulse leads the ISM by 14 months, and the study says equities take a median of four months just to PEAK. Both things can be true: the regime is worse, and the timing is not now.

So what would make me care? Three tripwires. First, the Treasury curve, not just the swap curve, inverts and STAYS inverted for a month or more... one day below zero is noise, twenty is a regime. Second, the front end keeps pricing hikes while the necessity impulse keeps falling, meaning the Fed is hiking into a fading cost shock rather than a broadening one. Third, and this is the one that would make 2027 look like 2007, a global coordinated tightening that persists.

The USD result in Theme 2 is the single strongest argument AGAINST our short USD lean, and I am not going to pretend otherwise. The study says the dollar rallies 3-5% in the six months after an inversion. Our current short USD lean is built on the transatlantic inflation spread, on the ECB and BoE having more hikes priced in than the Fed, and on crowded USD longs failing to rally into the first hike... an argument about the OTHER side of the USD-smile. Those could be my famous last words, but the lean stays a lean, sized as such, and the first tripwire above is also the tripwire for that trade, and remember we have NOT yet inverted.

Where the study and the regime agree, we lean in. Quality over Momentum is now our default equity factor tilt into year-end. Tech stays on top, not because it is a duration asset but because it is the sector with the earnings and the capex, and because the sector study says it outperforms after an inversion. Gold gets its post-inversion wobble bought, not sold, with the cheat sheet reminding us that a bull-steepener from the front (Fed cuts) is the regime where gold, Bitcoin, and the Nasdaq perform in tandem.

The bottom line: the swap curve has inverted, the Treasury curve is approaching (but still some room away), and the flattening came from the wrong end. That IS the worst curve regime, and I will not sugarcoat it. But history still says assets can tolerate it for a period of months (after the Treasury inversion); the cost shock that caused it is already fading, and the credit engine in this bond regime is running on a steeper curve than any framework from the bull-market years would recognize.

We respect the lags. If the Treasury curve inverts and stays there, this letter gets a very different tone in 5-6 months from now. Until then, markets have not yet been given a reason to dislike the regime, and neither have we.

Have a great week ahead, and good luck out there!



Andreas Steno

Andreas is the core macro consultant in Steno Research. Building on years of experience as Global Chief Strategist at Nordea Bank, he is one of the most quoted and sought-after macro analysts out there. Andreas' expertise is the FX/rates, energy, real estate and equity spaces, but doesn't shy away from hot takes on other topics if the underlying analysis is strong enough. Andreas anchors the weekly editorial 'Steno Signals'.

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