

Global Rate Regimes: Decoupling or Spillovers?

Final Presentation:

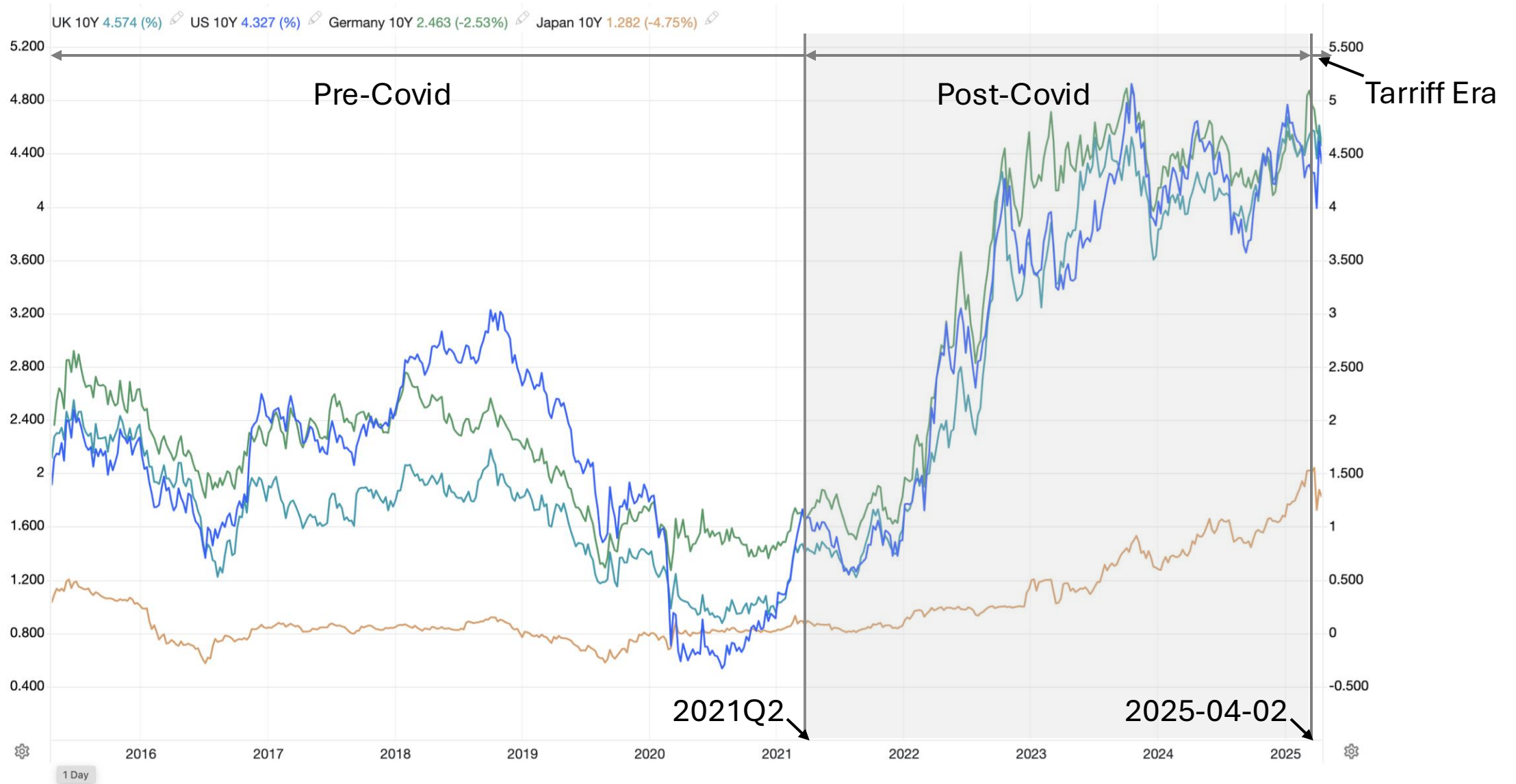
Event Studies & Term Premium Cross-Country Analysis

JO, 2025 April

Content

- Global Rate Issue and Hypothesis
- Methodology: Event Study 1~4
- Wrap-ups and Insights
- Extended to Tariff
- Q&A

Global Rate Trends: Post-COVID Shift vs. Pre-COVID



Global Rate Divergence – Fact or Fiction?

Key questions

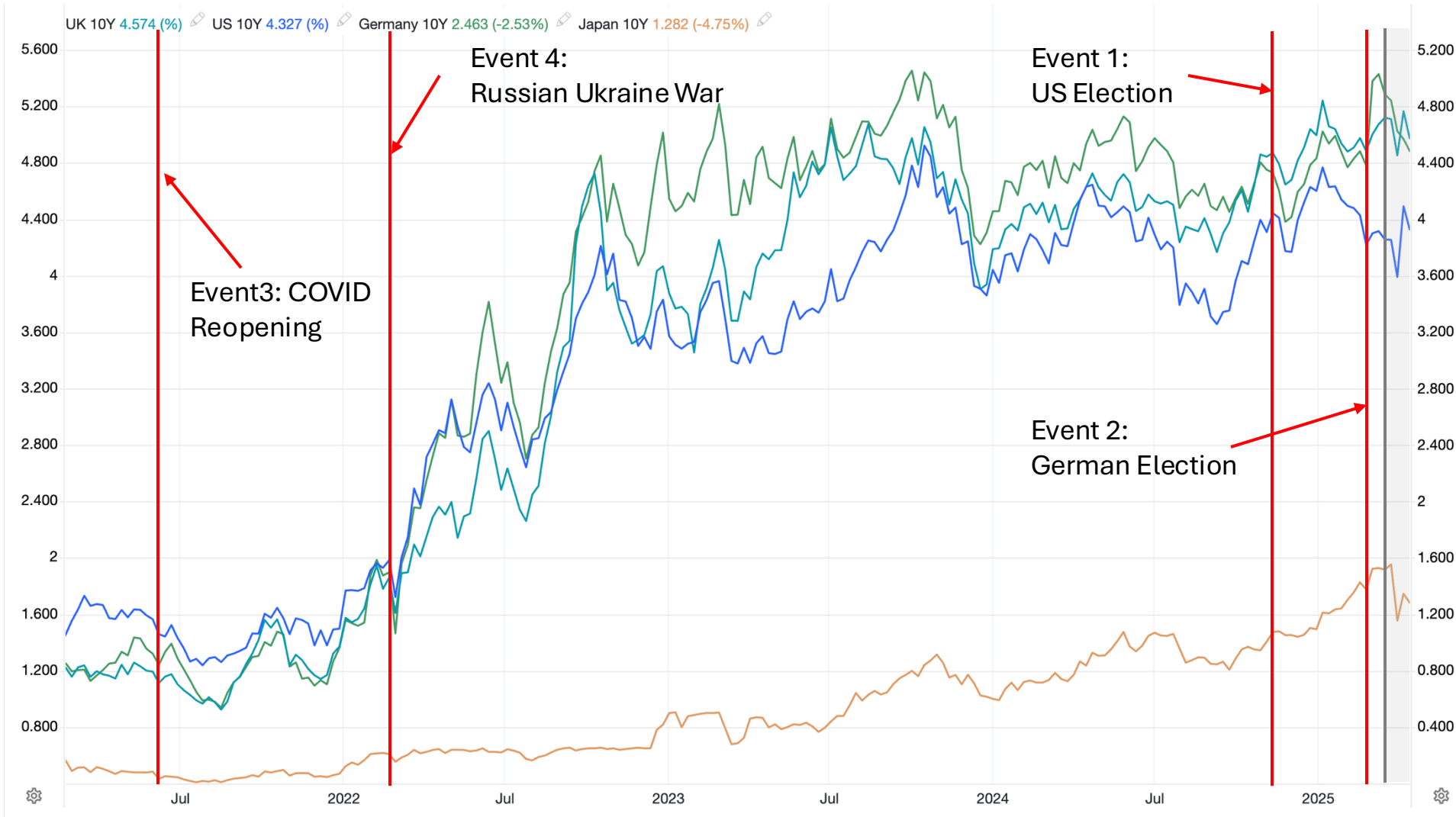
1. How could we understand the global rate divergence?
2. What are the key drivers of the divergence in global interest rates post-COVID?
3. How have yield curves in major economies shifted from pre-COVID to post-COVID?

Methodology: Event Study & Term Premium Decomposition

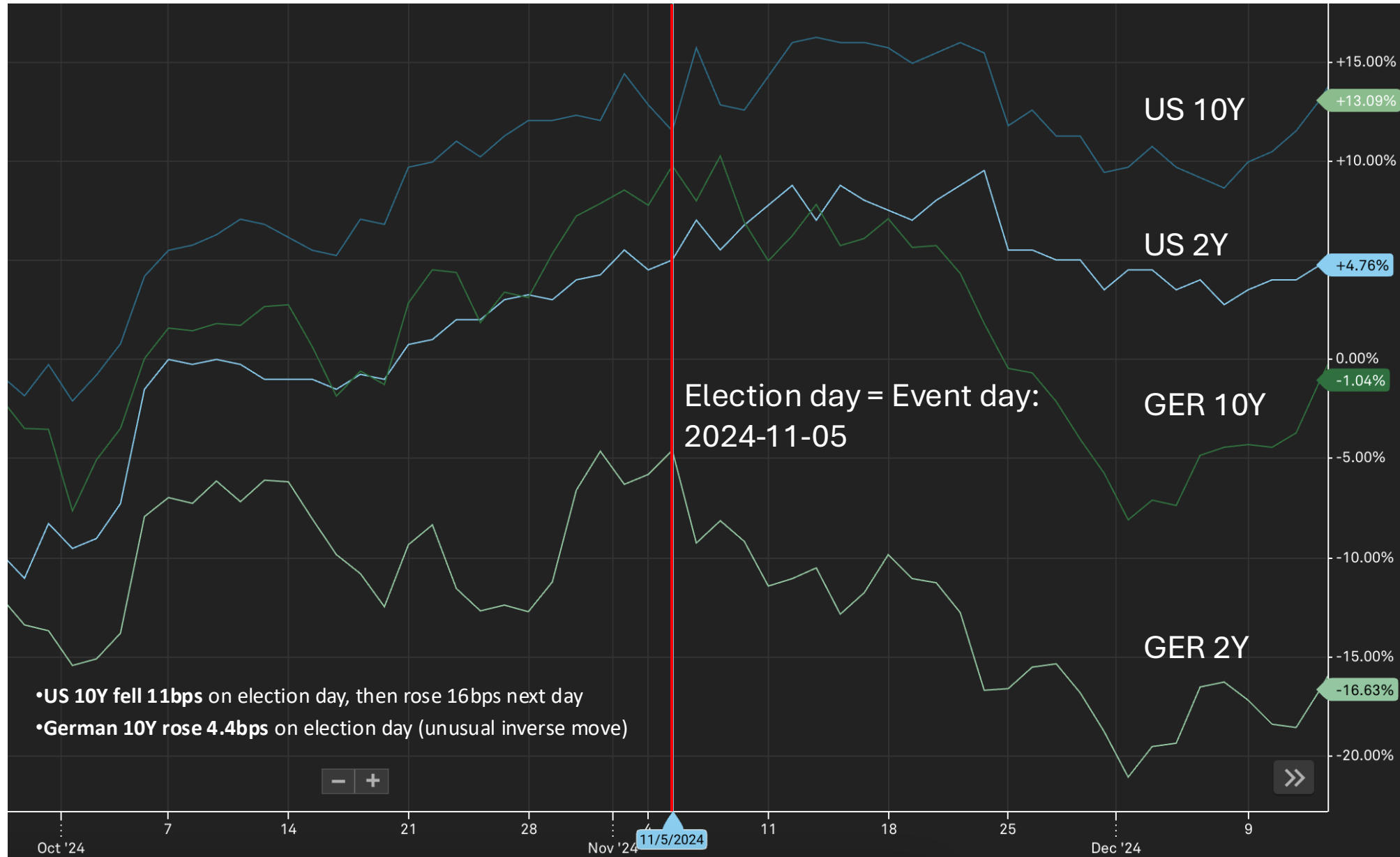
- Event mapping
- Event identification
- Event date specification
- Cross-country rate reaction (correlation & yield curve change)
- Term premium modelling for decomposition
- Wrap-up

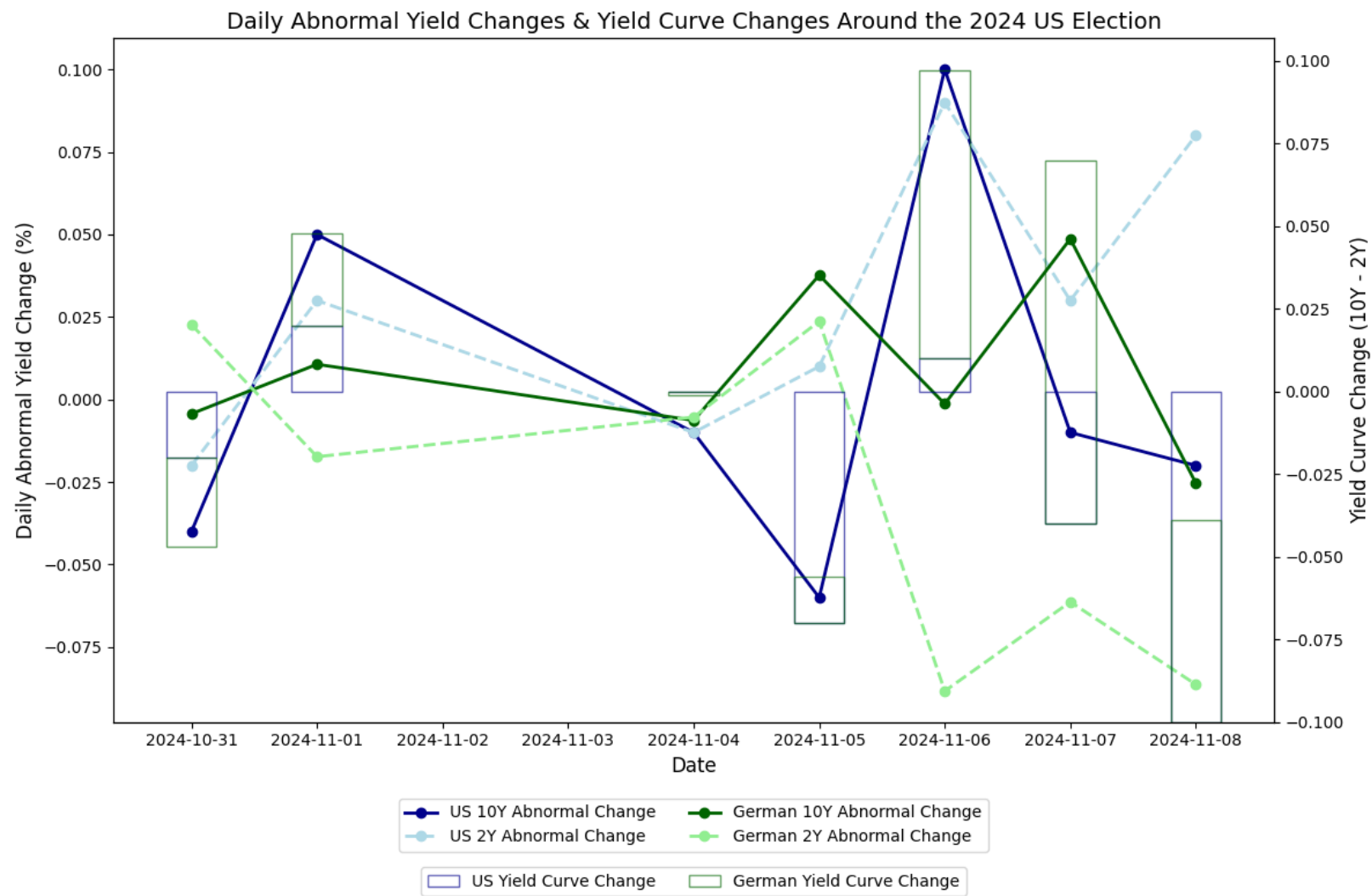
Quarter	Monetary Policy	Fiscal/Political	Geopolitical
2021 Q2	Post-Covid reopening		
2022 Q1	Fed hikes begin		Russia-Ukraine War
2022 Q3	ECB jumbo hikes	UK mini-budget	
2023 Q1	BoJ shocks markets	German energy crisis	
2023 Q3		US refunding	
2023 Q4		US refunding	Israel Gaza War
2024 Q1	BOJ eliminates YCC		
2024 Q2	ECB cut policy rates		
2024 Q3		Japan election	
2024 Q4		US election	
2025 Q1	ECB cut rate	German election	
2025 Q2		Trump Tarriff	

4 Significant Events Identification



Event 1_2024 US Election_Identification_2024-11-05





Yield Curve Slope	US	Germany
2024-11-04	0.14	0.13
2024-11-05	0.07	0.14
2024-11-06	0.15↑	0.21↑
2024-11-07	0.10↑	0.24↑
2024-11-08	0.04↓	0.16↑

Correlation	US - Germany
10Y	-0.20
2Y	-0.90
10Y Abnormal	-0.43
2Y Abnormal	-0.80

Daily abnormal yield change = daily real yield – average yield over 5 pre-event days
Yield curve change = daily 10Y yield – daily 2Y yield

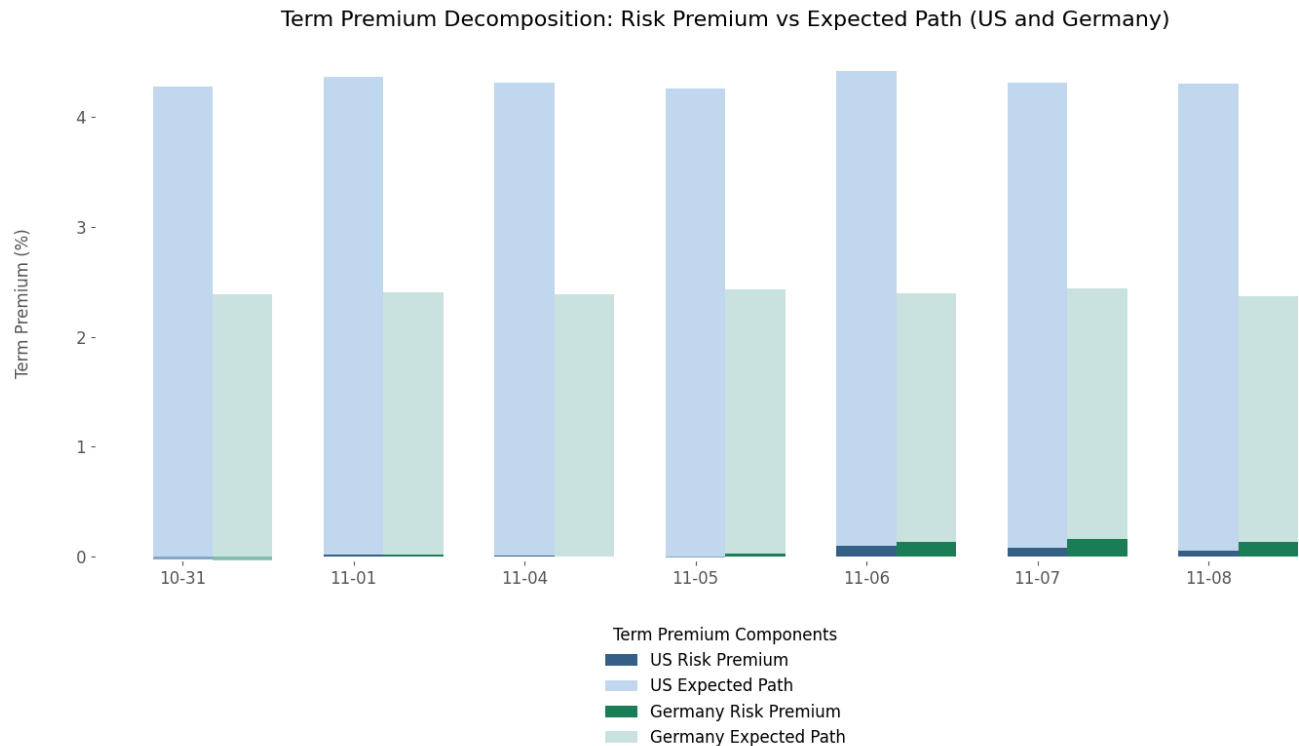
ACM model to decompose term premium

Term Premium (TP) = Risk Premium (RP) + Expected Path (EP)

- **Risk Premium (RP) = $0.55 \times (10Y - 2Y) - 0.25 \times VIX$**
 - 0.55: Weight applied to the slope of the yield curve (10Y - 2Y).
 - VIX: Volatility index that adjusts for market risk sentiment.
- **Expected Path (EP) = 10Y yield - Risk Premium**
 - Expected future interest rates based on the difference between long-term and short-term yields.

Source: Federal Reserve Bank of New York

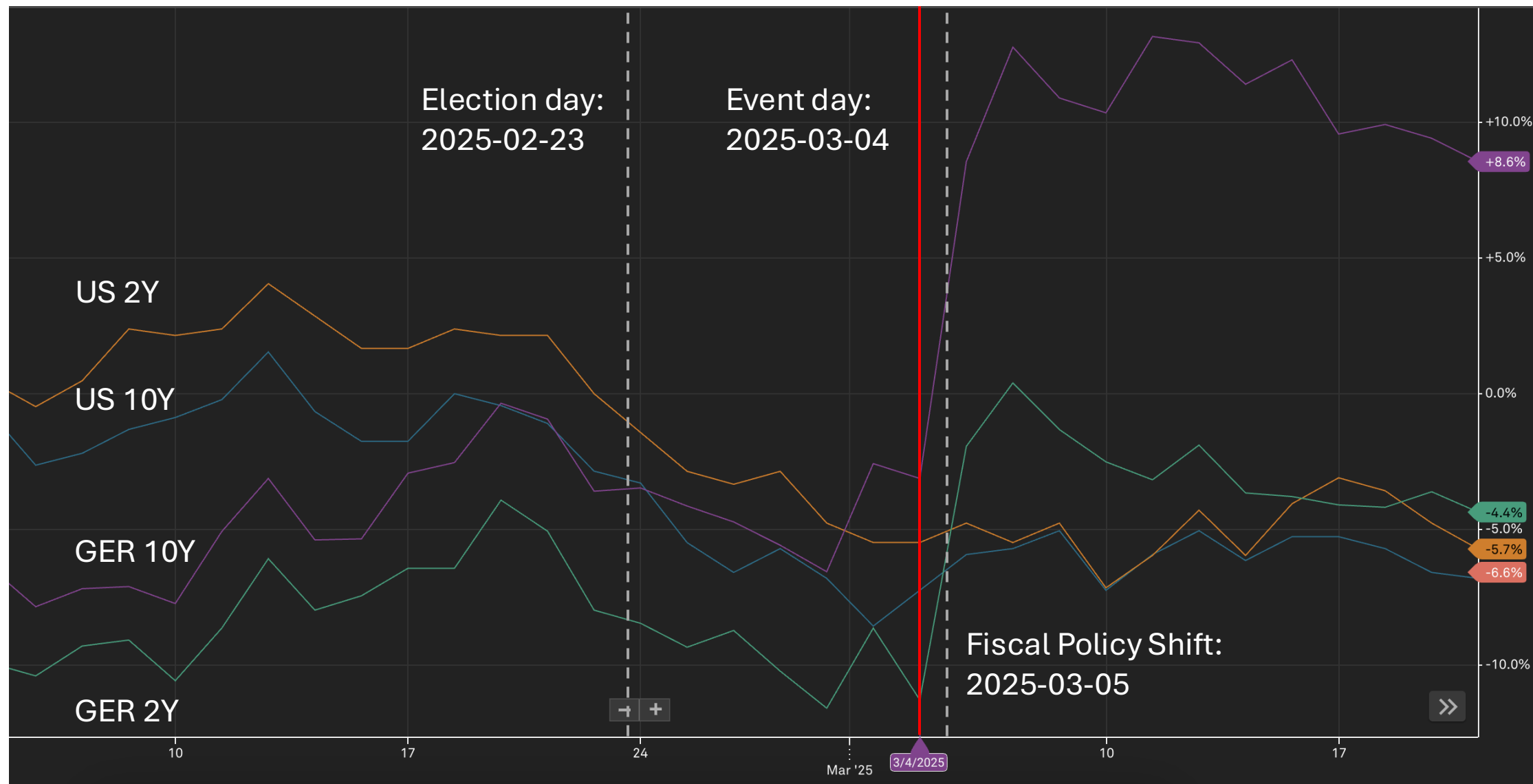
https://www.newyorkfed.org/research/data_indicators/term-premia-tabs#/overview



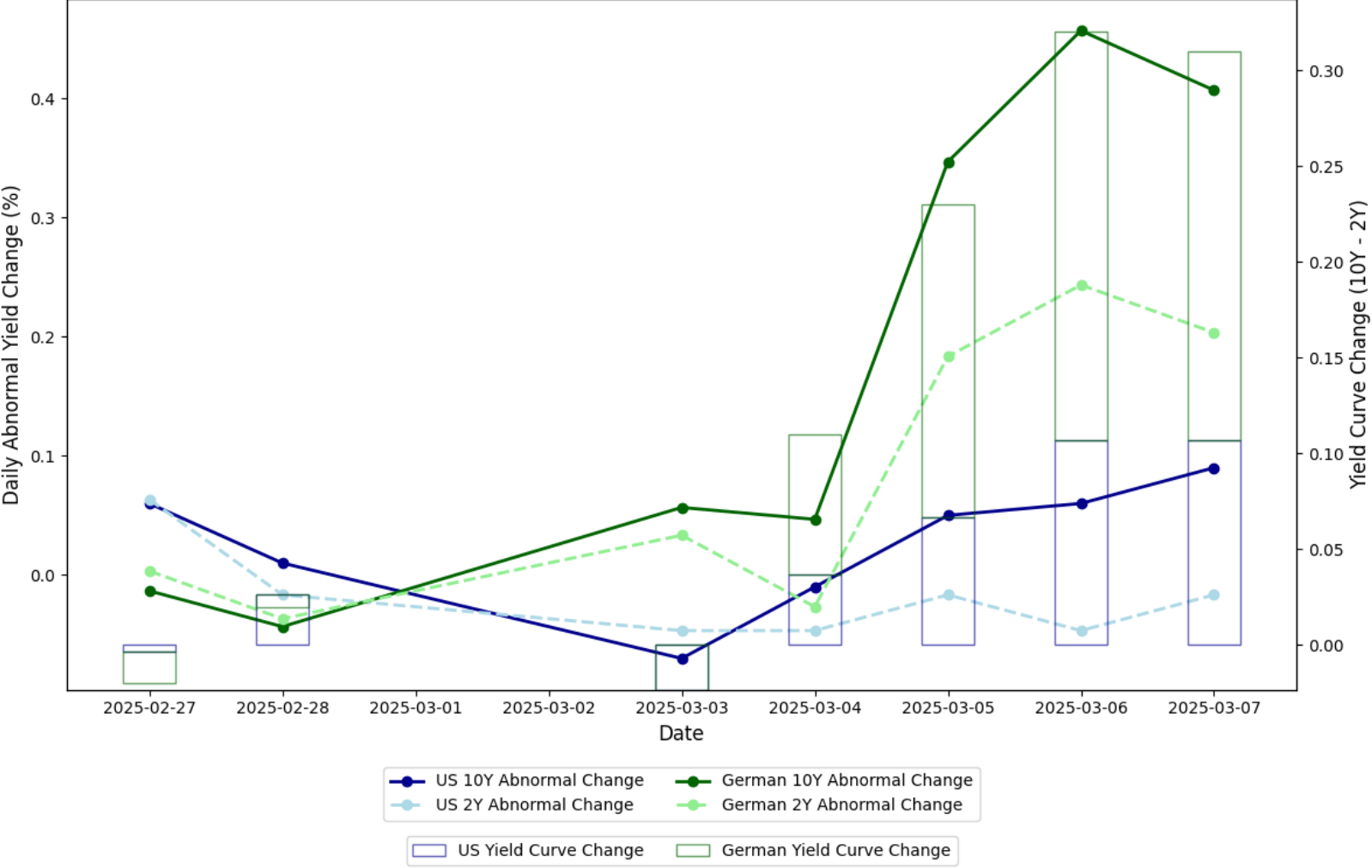
Date	US_RP	US_EP	GER_RP	GER_EP
2024-11-01	0.16	4.21	0.16	2.26
2024-11-04	0.14	4.17	0.13	2.26
2024-11-05	0.07	4.19	0.14	2.29
2024-11-06	0.15	4.27	0.13	2.26
2024-11-07	0.08	4.23	0.16	2.28
2024-11-08	0.05	4.25	0.13	2.23

- 1.Declining US Risk Premium:** reflect changing expectations following the US election;
- 2.Stable German Risk Premium:** suggests that market participants didn’t anticipate significant changes in German interest rates in response to the US election;
- 3.Steady Expected Path in US and Germany:** suggesting that while there were fluctuations in the risk premium, investors were not drastically altering their expectations for future rates during this time window.

Event 2_Germany Election_Identification_2025-03-04

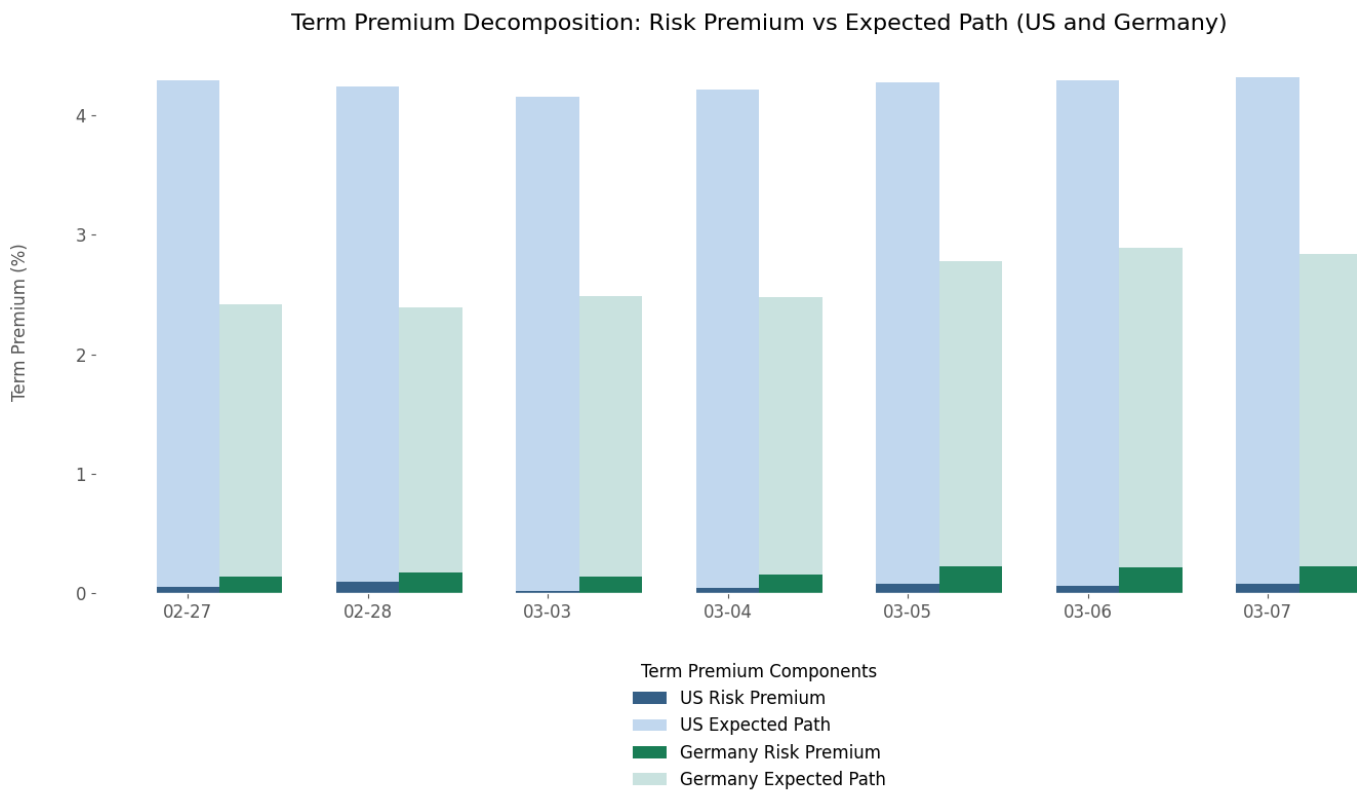


Daily Abnormal Yield Changes & Yield Curve Changes Around the 2025 German Election



Yield Curve Slope	US	Germany
2025-03-03	0.20	0.46
2025-03-04	0.26	0.47
2025-03-05	0.29↑	0.56↑
2025-03-06	0.33↑	0.61↑
2025-03-07	0.33↑	0.60↑

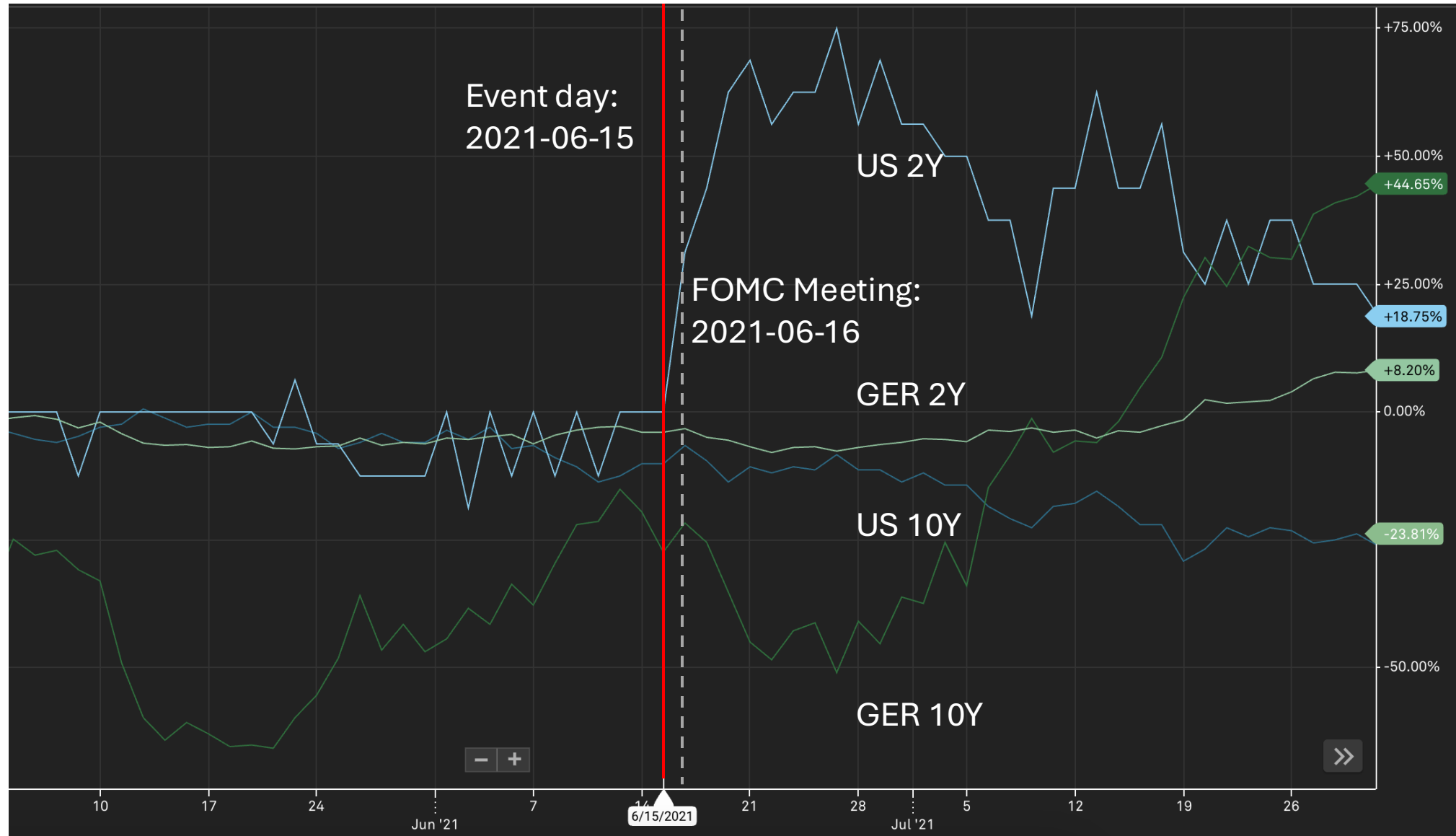
Correlation	US - Germany
10Y	0.59
2Y	-0.23
10Y Abnormal	0.22
2Y Abnormal	0.33



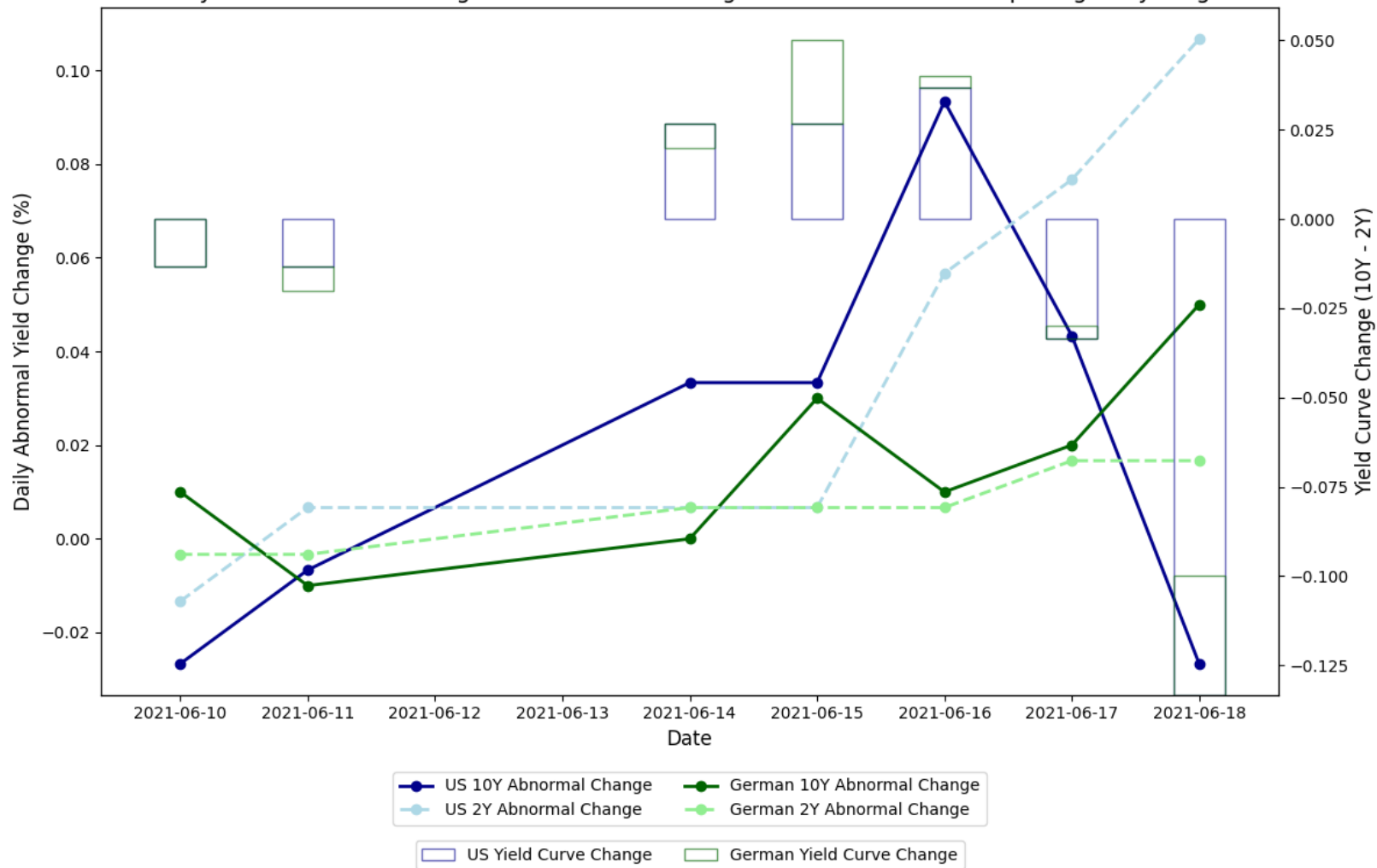
Date	US_RP	US_EP	GER_RP	GER_EP
2025-02-28	0.36	4.24	0.39	2.04
2025-03-03	0.20	4.16	0.42	2.07
2025-03-04	0.26	4.22	0.47	2.01
2025-03-05	0.29	4.28	0.56	2.22
2025-03-06	0.06	4.23	0.21	2.68
2025-03-07	0.08	4.24	0.23	2.61

- 1.US Risk Premium:** fluctuated between 0.20% to 0.36% before the event day, showing a slight decrease in risk premium right after the event day;
- 2.Germany Risk Premium:** peaked at 0.56% on the event following day but dropped more than US to 0.23, reflecting an increased certainty or market reaction to the election results.
- 3.Expected Path:** US remained relatively stable between 4.16% and 4.28%, suggesting market expectations for future US rates did not shift drastically during this period. The Expected Path for Germany went upward from 2.01% to 2.61%, indicating modest changes in expectations post-event.

Event 3_2021 Post-Covid Reopening_Identification_2021-06-15

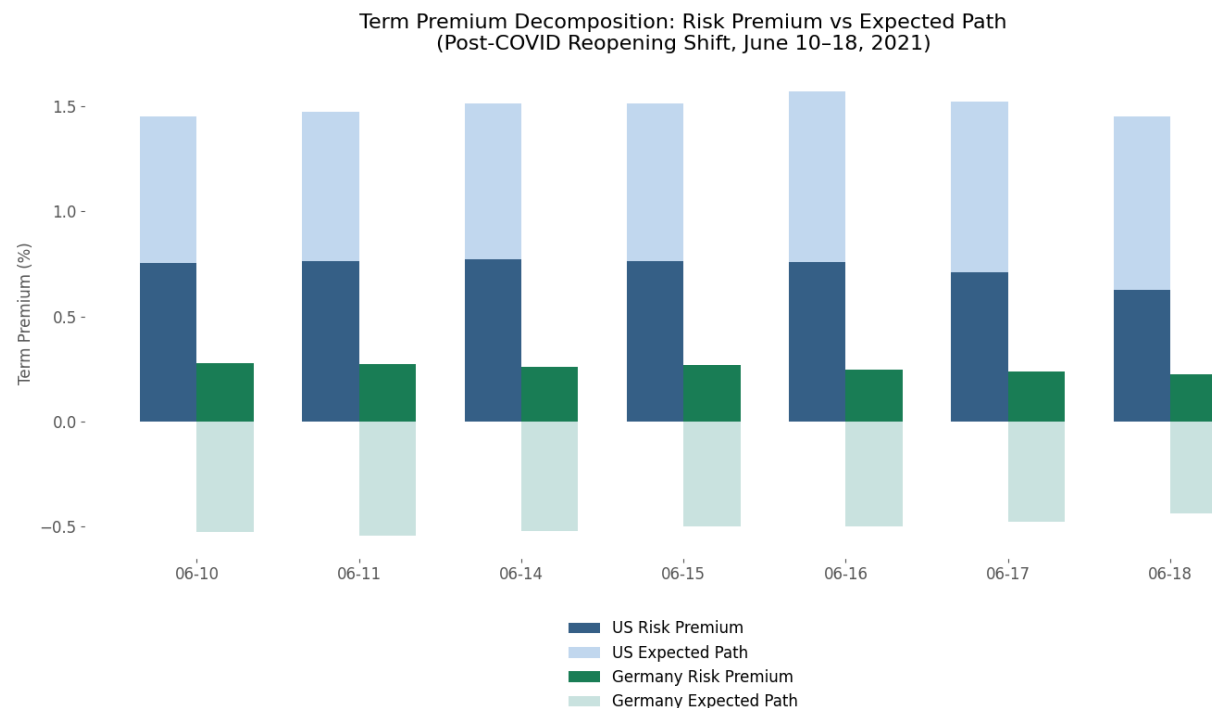


Daily Abnormal Yield Changes & Yield Curve Changes Around the 2021 Reopening Early Stage



Yield Curve Slope	US	Germany
2021-06-11	1.31	0.42
2021-06-14	1.35	0.42
2021-06-15	1.35	0.45
2021-06-16	1.36↑	0.43↓
2021-06-17	1.29↓	0.43↓
2021-06-18	1.19↓	0.46↑

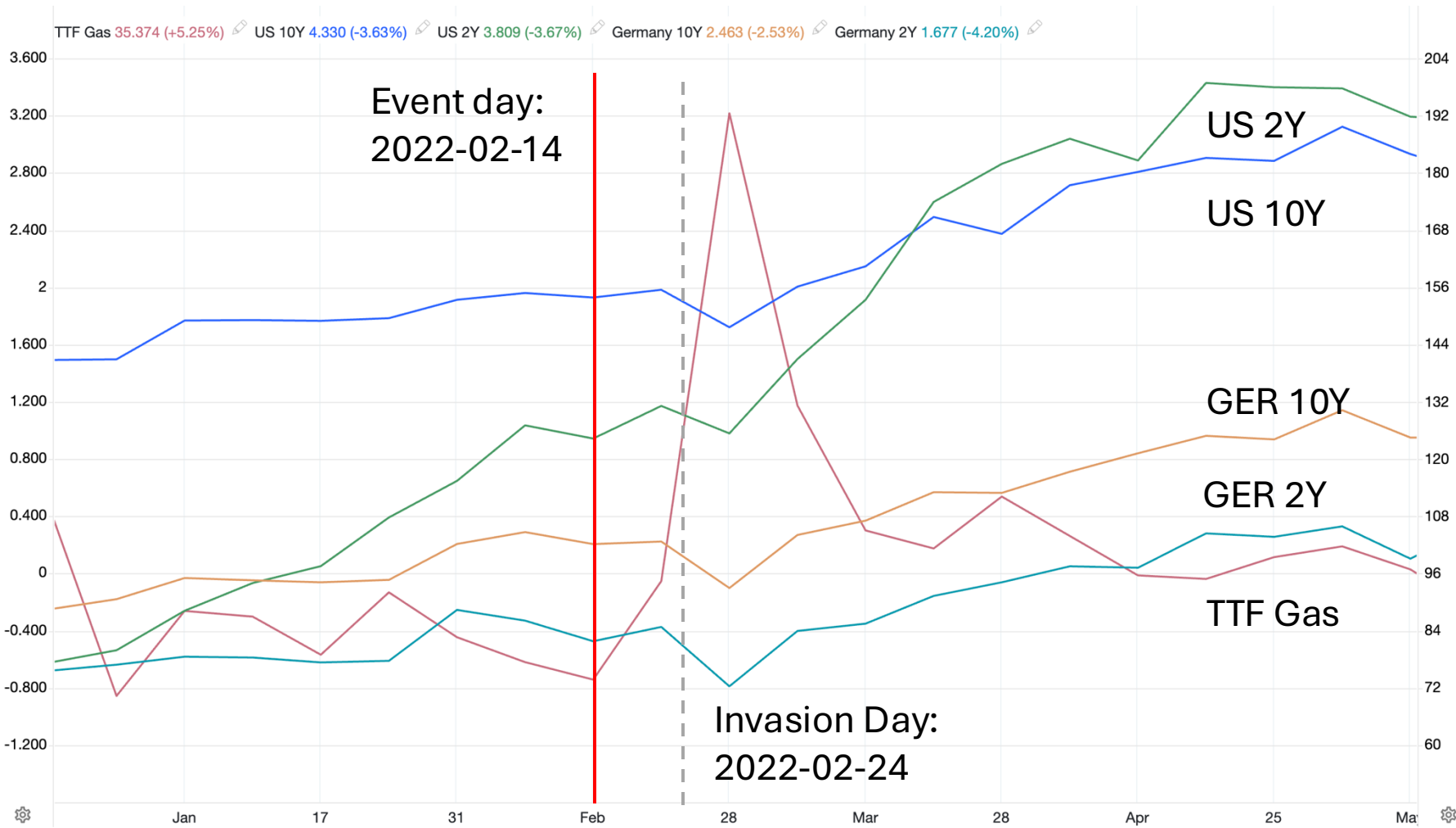
Correlation	US - Germany
10Y	-0.19
2Y	0.86
10Y Abnormal	-0.66
2Y Abnormal	-0.41

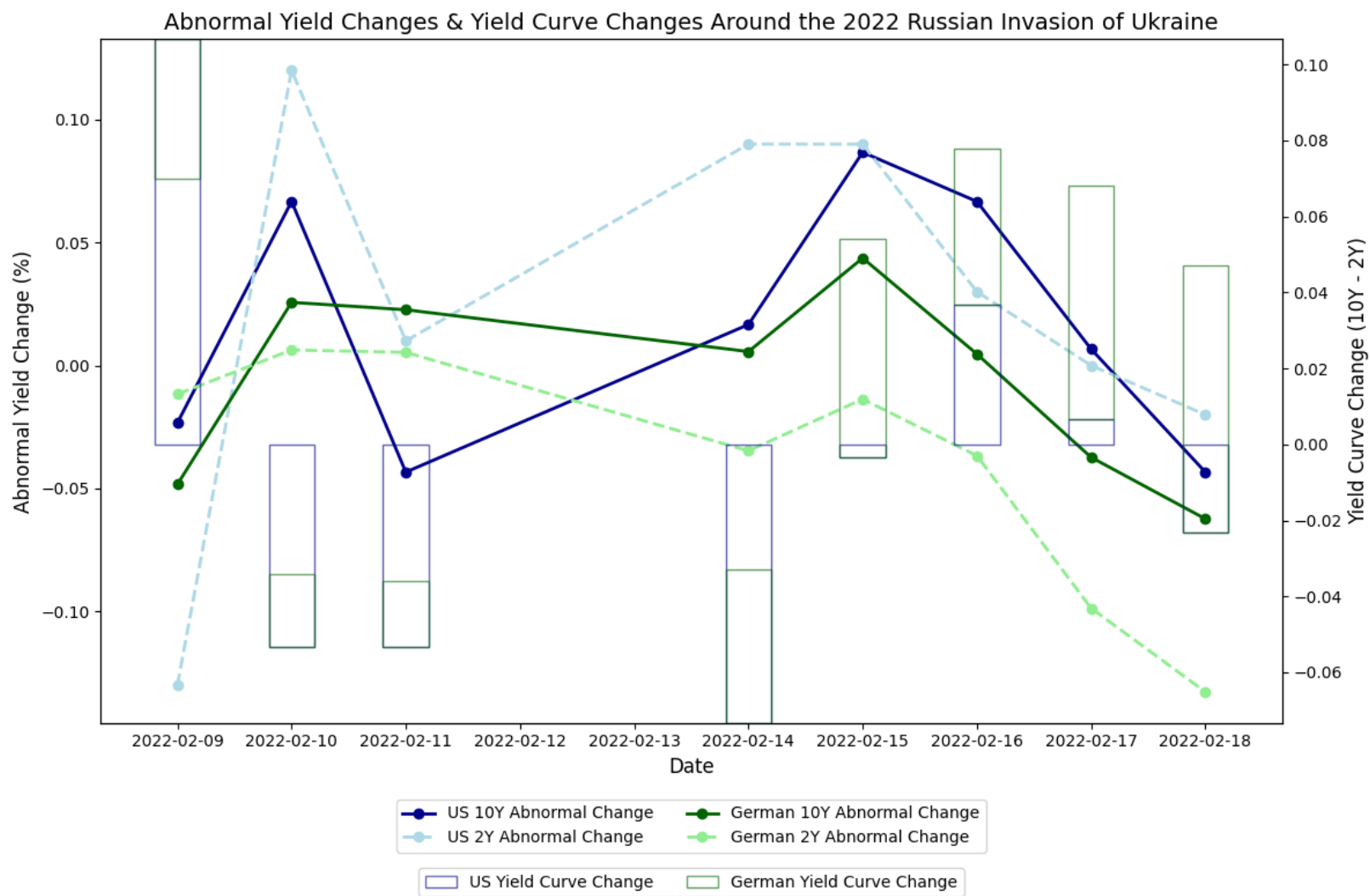


Date	US_RP	US_EP	GER_RP	GER_EP
2021-06-11	0.76	0.71	0.27	-0.54
2021-06-14	0.77	0.74	0.26	-0.52
2021-06-15	0.76	0.75	0.27	-0.50
2021-06-16	0.76	0.81	0.25	-0.50
2021-06-17	0.71	0.81	0.24	-0.48
2021-06-18	0.63	0.82	0.23	-0.44

1. **The U.S. had higher risk premiums**, indicating more market uncertainty,
2. **Germany risk premiums had a relatively stable outlook**, indicating confidence in ECB support.
3. **From the expected paths**, the overall market sentiment was shifting toward a post-COVID recovery, with expectations of **gradual monetary tightening in the U.S.** but a **more stable policy path in Germany**.

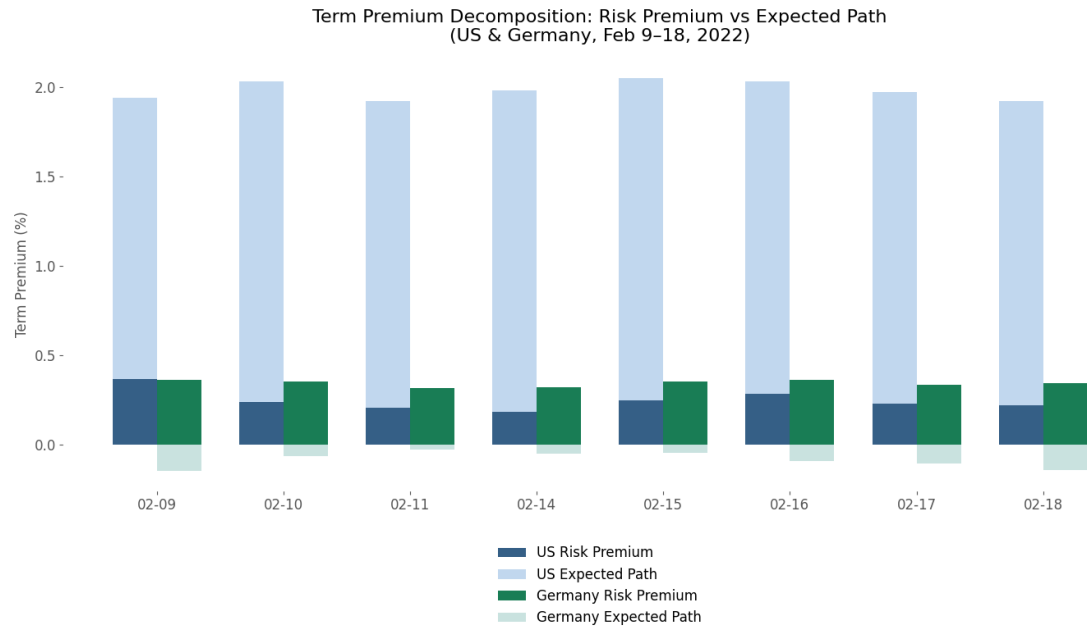
Event 4_2022 Russian Invasion of Ukraine_Identification_2022-02-24





Yield Curve Slope	US	Germany
2022-02-11	0.42	0.63
2022-02-14	0.40	0.65
2022-02-15	0.47↑	0.66↑
2022-02-16	0.51↑	0.65↔
2022-02-17	0.48↑	0.67↑
2022-02-18	0.45↑	0.68↑

Correlation	US - Germany
10Y	0.66
2Y	0.25
10Y Abnormal	0.67
2Y Abnormal	0.33



Date	US_RP	US_EP	GER_RP	GER_EP
2022-02-10	0.24	1.79	0.35	-0.06
2022-02-11	0.21	1.71	0.32	-0.03
2022-02-14	0.18	1.80	0.32	-0.05
2022-02-15	0.25	1.80	0.36	-0.05
2022-02-16	0.29	1.74	0.36	-0.09
2022-02-17	0.23	1.74	0.33	-0.11
2022-02-18	0.22	1.70	0.34	-0.14

- The Germany had higher risk premiums than the US**, indicating more market uncertainty, since the energy concern loomed more in Germany
- US had an increase in risk premium** with an implication of more market uncertainty, while **Germany had a relatively calm outlook**, indicating confidence in ECB support.
- The expected path for the US slightly decreased**, indicating an expectation of a more dovish approach to support economic growth, while there was **a big negative EP in Germany**, it's signalling that the market was pricing in future rate cuts (or lower growth/inflation expectations), even if the risk premium itself remained positive.

Wrap-up 1: correlations of 10Y, 2Y, abnormal 10Y, abnormal 2Y

Corr	E1				E2				E3				E4			
	10Y	2Y	A10Y	A2Y	10Y	2Y	A10Y	A2Y	10Y	2Y	A10Y	A2Y	10Y	2Y	A10Y	A2Y
C1	-	--	-	--					-	++	--	-				
C2					++	-	+	+								
C3													++	++	++	+

1. **Global Shocks Exhibit a Strong Positive Correlation:** leading to synchronized movements;
2. **US-Led Events Have Limited Spillover Effects:** The impact of U.S.-centric events appears to be more contained, with less influence on global markets, particularly over the long term.
3. **Regional Events Reflect Short-Term Divergence, Long-Term Convergence.**

Use abbrev. to summarize the terms in the table below for the above table.

Event-1: US Election	Event-2: German Election	Event-3: COVID Reopening	Event-4: Russian Ukraine War
E1	E2	E3	E4
C1	C2	C1	C3

Corr: -1~-0.5	Corr: -0.5-0	Corr: 0-0.5	Corr: 0.5-1
--	-	+	++
Strong negative	Negative	Positive	Strong Positive

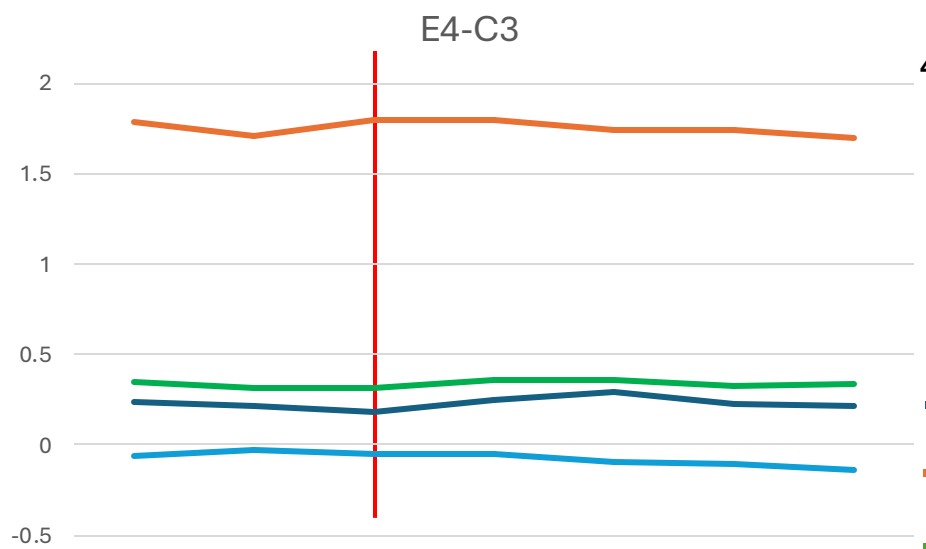
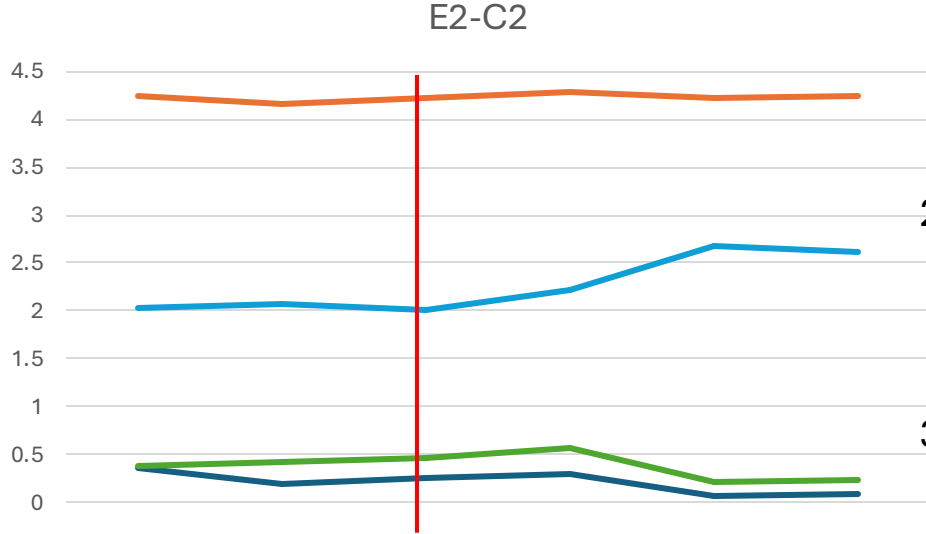
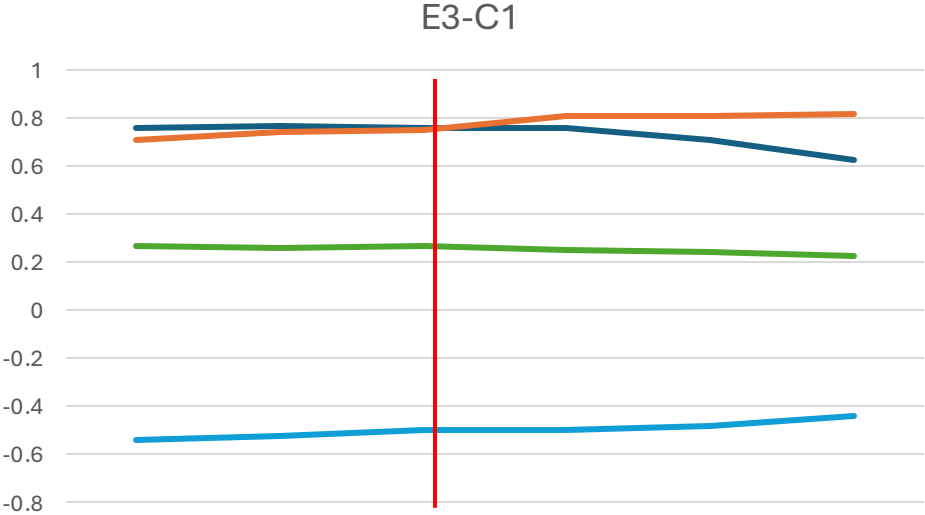
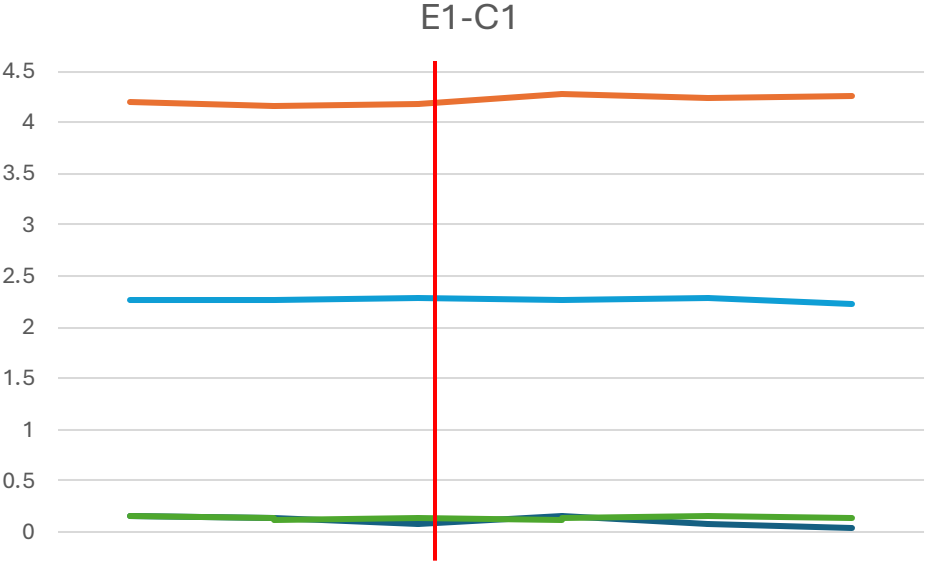
US-Led Event	Regional Event	Global shock
Category 1	Category 2	Category 3
C1	C2	C3

Wrap-up 2: yield curve slopes of US and Germany

	E1		E2		E3		E4	
	US	GER	US	GER	US	GER	US	GER
C1	0.07→0.04↓	0.14→0.16↑			1.35→1.19↓	0.45→0.46↑		
	F	S			F	S		
C2			0.26→0.33↑	0.47→0.60↑				
			S	S				
C3							0.40→0.45↑	0.65→0.68↑
							S	S
Event Day Yield Curve Slope → Last Day of the Event Window Yield Curve Slope; Flattening: F; Steepening: S								

- 1. Global Shocks:** Global markets react with synchronized movements in yield curves across regions.
- 2. US-Led Events:** The US yield curve exhibits limited spillover effects, with movements often diverging from other markets.
- 3. Regional Events:** Regional markets experience more pronounced reactions in their yield curves but generally move in the same direction as the US.

Wrap-up 3: term premium decomposition



1. US-led events (E1, E3) decrease uncertainty in the US market while having minimal or lesser impact on German market stability.;
2. Regional event (E2) reflects similar patterns, with regional markets reacting in a comparable way.
3. Global shock (E4) leads to divergent expectations for short-term and long-term rates.
4. The unsynchronized expected paths for all events highlight differing perspectives across governments.



Insights & Suggestions

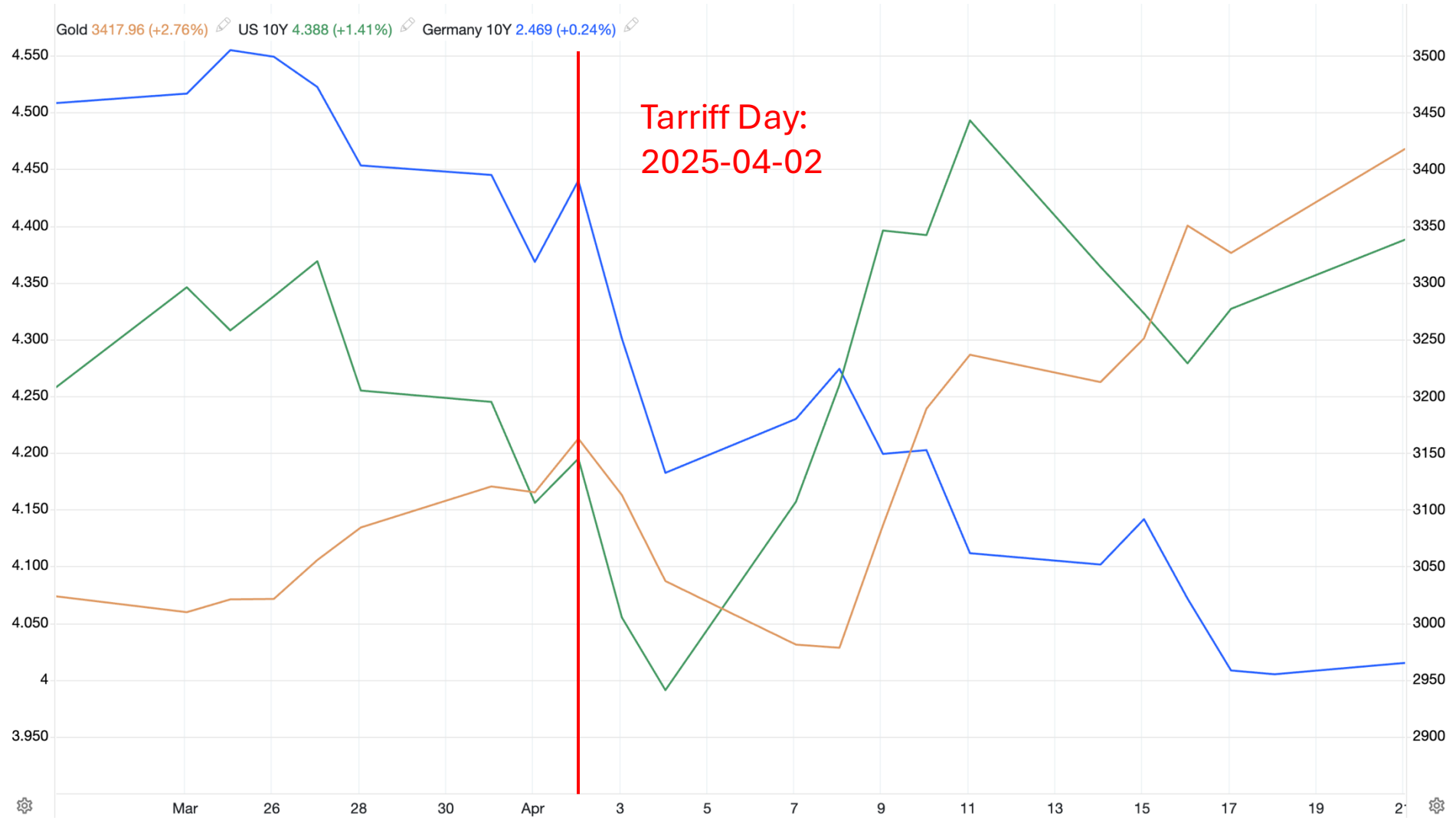
1. **US-led events** primarily impact the US market, with **limited spillover effects on other regions**. **Regional events**, especially in Europe, affect local yield curves more significantly, but **the spillover to the US remains constrained**.

For ***, this suggests focusing on US-centric strategies during US-led events and considering regional diversification as a hedge during local market stress, particularly in Europe, where inflation and sluggish economic growth are key concerns.

2. **Global events** tend to move markets in a synchronized direction yet create **significant divergence in short-term and long-term expectations**. This divergence arises from **differing economic priorities across regions**—such as the US's focus on employment, inflation, and tariffs, versus Europe's concerns with inflation and economic stagnation.

*** can capitalize on this by dynamically adjusting its portfolios, differentiating between short-term and long-term rate expectations, and leveraging strategies like yield curve steepeners and flatteners during these periods of market transition.

Entering the New Era with Tariff



Thoughts on Tariff in Terms of Our Global Rate Analysis

- 1. How Tariffs Differ from Earlier Events:** Unlike previous economic shocks, tariffs introduce a **supply-side shock** that impacts global supply chains, inflation, and consumer behaviour.. Tariffs, especially those involving large economies like the US and China, create **far-reaching consequences, pushing inflation higher and complicating policy responses**, unlike past events that primarily affected demand-side conditions.
- 2. Economic Outlook Amid Global Rate Divergence:** *a more regionalized trading environment, a weaker dominance of the US dollar in global transactions, more diverging economic policies* across major economies. This divergence in economic priorities is driving **a broader and more pronounced global rate divergence**, signalling that a “higher-for-longer” interest rate environment could persist, and longer-term rate expectations could shift dramatically.