



# Macro Stress Map: Energy, Credit & Risk Aversion

Topix 100 Exposure Analysis - MFERM Exposures as of 6 March 2026 | QI\_APAC\_ MACRO\_MT\_1

**Objective:** To quantify how a simultaneous positive shock to: WTI crude, Japan corporate credit spreads, implied volatility, would transmit through Topix 100 constituents using MFERM exposures as of 6 March 2026. The result is stark: every single name in the Topix 100 has negative Japan Corporate Credit exposure. There are zero natural hedges. 77 stocks are hurt by both higher oil and wider spreads. The only nuance is a handful of names with positive Energy exposure and manageable credit drag.

## Energy vs. Japan Corporate Credit: The Full Map

X-axis = Energy (WTI) exposure. Y-axis = Japan Corporate Credit (JPY credit spreads) exposure. Red dashed lines = average negative exposure thresholds. Every name sits below zero on the Y-axis — no stock benefits from wider Japanese credit spreads.





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## Key Findings

- **Zero natural hedges.** Not a single Topix 100 name has positive Japan Corporate Credit exposure. The entire index is uniformly short Japanese credit. In the S&P 500, 11 names sat in the top-right; in the Euro Stoxx 50, 4. In the Topix 100: zero. An Iran-driven credit widening event would hit every name in the index without exception.
- **Bottom-Left — The Double Losers** – 77 out of 100 names are hurt by both higher oil and wider credit spreads. Japan's semiconductor complex dominates the extreme: DISCO (-1.41 Credit), Fujikura (-1.39), Advantest (-1.25), SoftBank Group (-1.24), Sumitomo Electric (-1.26). These are massive credit sensitivities — far deeper than anything in the S&P 500 or Euro Stoxx. Hitachi (-1.05), Tokyo Electron (-1.00), and TDK (-0.97) complete the picture. Japan's industrial champions are acutely exposed to the credit-oil vortex.
- **The Nuanced Trade** – With no natural hedges, the best you can do is find positive Energy exposure with credit drag above the -0.58 average. Takeda (+0.14 Energy, -0.31 Credit) is the cleanest. JR West (+0.09, -0.16) and JR East (+0.07, -0.12) are the real standouts — Japanese railways with minimal credit sensitivity and positive oil exposure. Fujitsu (+0.12, -0.52) and Mitsui OSK Lines (+0.11, -0.57) are borderline but still above the average.
- **Oil Winners With Heavy Credit Drag** – ENEOS (+0.19 Energy) is Japan's only direct oil play, but carries -0.75 Credit — the oil tailwind gets swamped by credit widening. NEC (+0.15 Energy, -0.76 Credit) is similar. FANUC and Mitsubishi Heavy have positive Energy but -0.87 to -0.93 Credit. These names rally on crude in isolation but would lose in a full correlated shock.



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- The Triple Whammy** – Japan’s Risk Aversion picture is more nuanced than Europe. Several names carry positive Risk Aversion exposure (DISCO +0.20, Advantest +0.15, SoftBank +0.15) meaning they actually benefit from vol spikes – rare globally. But Sony (-0.32), Unicharm (-0.31), Suzuki (-0.30), and TDK (-0.28) are heavily short vol. For these names, a geopolitical VIX spike adds a third compounding factor on top of oil and credit.

## The Playbook: Losers & The Nuanced Trade

All exposures in % return per 1 SD move higher in factor. Combined = Energy + Japan Corporate Credit.

Ticker	Name	Sector	Energy	JP Credit	Risk Av.	Combined
<b>DOUBLE LOSERS (BOTTOM-LEFT)</b>						
<b>DISCO</b>	DISCO Corp	Semis	-0.280	-1.413	0.197	<b>-1.693</b>
<b>Fujikura</b>	Fujikura	Elec.	-0.223	-1.392	-0.216	<b>-1.615</b>
<b>Advantest</b>	Advantest	Semis	-0.204	-1.248	0.154	<b>-1.452</b>
<b>SoftBank</b>	SoftBank Group	Tech	-0.175	-1.241	0.153	<b>-1.416</b>
<b>Sumitomo</b>	Sumitomo Electric	Elec.	-0.124	-1.259	-0.025	<b>-1.383</b>
<b>Lasertec</b>	Lasertec	Semis	-0.188	-1.016	0.013	<b>-1.204</b>
<b>Hitachi</b>	Hitachi	Indust.	-0.148	-1.053	0.014	<b>-1.201</b>
<b>Renesas</b>	Renesas Electronics	Semis	-0.006	-1.193	-0.110	<b>-1.199</b>
<b>TDK</b>	TDK Corp	Elec.	-0.227	-0.970	-0.284	<b>-1.197</b>
<b>Tokyo El.</b>	Tokyo Electron	Semis	-0.110	-1.003	0.122	<b>-1.113</b>
<b>THE NUANCED TRADE (OIL UPSIDE, MANAGEABLE CREDIT)</b>						
<b>Takeda</b>	Takeda Pharma	Pharma	+0.143	-0.311	-0.063	<b>-0.168</b>
<b>Fujitsu</b>	Fujitsu	Tech	+0.121	-0.520	-0.043	<b>-0.399</b>
<b>Mitsui OSK</b>	Mitsui OSK Lines	Ship.	+0.112	-0.566	0.035	<b>-0.454</b>
<b>JR West</b>	West Japan Railway	Transp.	+0.087	-0.160	-0.029	<b>-0.073</b>
<b>NRI</b>	Nomura Research Inst.	Tech	+0.084	-0.341	-0.047	<b>-0.257</b>
<b>JR East</b>	East Japan Railway	Transp.	+0.066	-0.117	-0.045	<b>-0.051</b>
<b>OIL WINNERS – BUT HEAVY CREDIT DRAG</b>						
<b>ENEOS</b>	ENEOS Holdings	Energy	+0.187	-0.747	-0.050	<b>-0.560</b>
<b>NEC</b>	NEC Corp	Tech	+0.154	-0.763	-0.109	<b>-0.609</b>
<b>JP Post</b>	Japan Post Bank	Banks	+0.083	-0.628	-0.044	<b>-0.545</b>
<b>FANUC</b>	FANUC	Indust.	+0.065	-0.929	-0.080	<b>-0.864</b>
<b>MHI</b>	Mitsubishi Heavy	Indust.	+0.054	-0.869	-0.035	<b>-0.815</b>
<b>Dai-ichi</b>	Dai-ichi Life	Insur.	+0.022	-0.919	-0.051	<b>-0.897</b>



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## Sector Clusters

- **Semiconductors & Electronics (DISCO, Fujikura, Advantest, Lasertec, Tokyo Electron, Renesas, TDK):** The epicentre of Japanese credit sensitivity. DISCO at -1.41 and Fujikura at -1.39 are the deepest credit exposures across any of the three indices we've analysed. Japan's semi supply chain is structurally short credit — and short oil. A geopolitical event hits both channels.
- **Autos (Toyota, Honda, Suzuki):** Toyota at -0.49 Credit and -0.12 Energy sits deep in the bottom-left. Honda and Suzuki are similar. Yen weakness (the DM FX factor) is the traditional auto hedge, but that doesn't help in a credit-oil shock.
- **Railways (JR East, JR West):** The closest thing to a hedge in the Topix 100. Positive Energy exposure (+0.07 to +0.09) and the shallowest credit drag in the index (-0.12 to -0.16). Regulated domestic revenue with minimal credit sensitivity.
- **Trading Houses (Mitsui & Co, Mitsubishi Corp):** Positive or near-zero Energy but deep credit sensitivity (-0.51 to -0.57). The oil tailwind exists but gets offset by credit widening. Not the clean oil trade PMs might assume.
- **Energy (ENEOS):** Japan's sole energy major. Highest Energy exposure in the index at +0.19 but -0.75 Credit drag means the net combined impact is negative in a full correlated shock.
- **Pharma (Takeda, Shionogi, Otsuka):** Positive Energy, shallow credit. Takeda at +0.14 Energy and -0.31 Credit is the single cleanest "oil hedge" available in the Topix 100.

Do you know which names in your book are sitting on macro landmines if Iran escalates? And which ones are natural hedges? MFERM maps the full landscape.



## Methodology

All data sourced from Quant Insight MFERM (Macro Factor Equity Risk Model), QI\_US\_MACRO\_MT\_1. Energy factor = WTI Crude Oil. Corporate Credit = CDX HY (US High Yield Credit Default Swaps). Risk Aversion = VIX implied volatility. Exposures represent % return per 1 daily standard deviation move higher in the factor (250-day lookback via Partial Least Squares Regression). Chart generated from full S&P 500 exposure dataset dated 27 February 2026.

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