



Macro Stress Map: Energy, Credit & Risk Aversion

KOSPI 200 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 KOSPI 200 constituents using MFERM exposures as of 6 March 2026. Only 46 names are hurt by both higher oil and wider spreads. 94 names have positive Energy exposure. Korea's defence and shipbuilding complex is the dominant feature: massive oil sensitivity, heavy credit drag, but long volatility provides a natural offset.

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. Only 1 name (KEPCO) sits in the top-right with positive Credit exposure.





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Key Findings

- **Bottom-Left — The Double Losers** – 46 names are hurt by both higher oil and wider credit spreads. Korea's battery supply chain dominates: SKC (-0.93 Credit), SK IE Technology (-0.77), L&F (-0.77). These are the EV value chain names that carry deep credit sensitivity plus negative Energy exposure — a geopolitical oil shock hits them on both channels. LG Display (-0.72 Credit) and LG Innotek (-0.77) add the display/component layer. SK Hynix (-0.71 Credit) sits here too — Korea's semiconductor champion is structurally short credit.
- **The Defence & Shipbuilding Cluster** – This is Korea's unique feature. LIG Nex1 (+1.09 Energy) has the highest oil exposure of any name across all four indices we've analysed. KEPCO Engineering (+0.88), Hyundai Rotem (+0.82), Hanwha Aerospace (+0.53), Hanwha Ocean (+0.57) — these names have enormous positive Energy exposure. But they carry heavy credit drag (-0.53 to -1.07). The critical difference: most are also long vol. LIG Nex1 has +0.83 Risk Aversion, Hanwha Aerospace +0.67, HMM +0.63. In a geopolitical shock, the VIX spike partially offsets the credit drag.
- **The Nuanced Trade** – SK Telecom (+0.51 Energy, -0.01 Credit) is the single cleanest oil hedge in the KOSPI 200 — near-zero credit sensitivity with massive Energy upside. Samsung Biologics (+0.35, -0.23), GS Holdings (+0.35, -0.23), Samsung Life Insurance (+0.33, -0.24), and Hyundai Motor (+0.26, -0.29) all sit in the sweet spot: positive Energy, credit drag above the -0.44 average. Korea Gas (+0.23, -0.12) is the other standout with minimal credit exposure.



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The Playbook

All exposures in % return per 1 SD move higher in factor. Combined = Energy + Japan Corporate Credit.
Green Risk Aversion = benefits from vol spike.

Ticker	Name	Sector	Energy	JP Credit	Risk Av.	Combined
DOUBLE LOSERS (BOTTOM-LEFT)						
SKC	SKCo	Batt.	-0.082	-0.934	+0.222	-1.016
SKIETech	SKIE Technology	Batt.	-0.214	-0.773	+0.352	-0.987
L&F	L&F Co	Batt.	-0.189	-0.766	+0.304	-0.955
LG Display	LG Display	Semis	-0.171	-0.723	+0.111	-0.894
LG Innotek	LG Innotek	Semis	-0.113	-0.769	-0.025	-0.882
Hanjin Kal	Hanjin Kal	Airlines	-0.184	-0.629	+0.009	-0.813
SK Hynix	SK Hynix	Semis	-0.028	-0.713	+0.347	-0.741
Hankook	Hankook & Co	Autos	-0.286	-0.456	0.000	-0.742
THE NUANCED TRADE (OIL UPSIDE, MANAGEABLE CREDIT)						
SK Telecom	SK Telecom	Telco	+0.506	-0.006	+0.323	+0.500
Pan Ocean	Pan Ocean	Ship.	+0.368	-0.369	+0.619	-0.001
Samsung Bio	Samsung Biologics	Pharma	+0.349	-0.228	-0.267	+0.121
GS Holdings	GS Holdings	Energy	+0.348	-0.230	+0.523	+0.118
Samsung Life	Samsung Life Ins.	Insur.	+0.334	-0.243	+0.519	+0.091
Hyundai Motor	Hyundai Motor	Autos	+0.256	-0.295	+0.073	-0.039
Korea Gas	Korea Gas Corp	Energy	+0.227	-0.116	+0.025	+0.111
JR West	CJ Logistics	Indust.	+0.148	-0.282	+0.170	-0.134
DEFENCE / SHIPBUILDING CLUSTER (HIGH OIL, HIGH CREDIT DRAG, LONG VOL)						
LIG Nex1	LIG Nex1	Defence	+1.091	-0.613	+0.831	+0.478
KEPCO Eng.	KEPCO Engineering	Utilities	+0.884	-0.630	+0.162	+0.254
Hyundai Rotem	Hyundai Rotem	Defence	+0.823	-0.527	+0.363	+0.296
Hanwha Sol.	Hanwha Solutions	Indust.	+0.570	-0.762	+0.471	-0.192
Hanwha Ocean	Hanwha Ocean	Shipbld.	+0.569	-0.856	+0.161	-0.287
Hanwha Aero.	Hanwha Aerospace	Defence	+0.525	-0.905	+0.672	-0.380
HMM	HMM Co	Ship.	+0.495	-0.613	+0.634	-0.118
Hanwha Corp	Hanwha Corp	Indust.	+0.482	-1.068	+0.638	-0.586



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Sector Clusters

- **Defence (LIG Nex1, Hanwha Aerospace, Hyundai Rotem, KAI):** Korea's defence sector is the Iran scenario trade. Massive Energy upside (+0.53 to +1.09), heavy credit drag, but long vol. In a geopolitical escalation, the defence spending thesis + vol tailwind could dominate the credit headwind. LIG Nex1 at +1.09 Energy is the highest exposure across all four indices.
- **Shipbuilding (Hanwha Ocean, HD Hyundai HI, Samsung Heavy):** Similar profile to defence – high Energy, deep credit, long vol. Hanwha Ocean at +0.57 Energy and -0.86 Credit with +0.16 Risk Aversion. These names rally on energy security narratives but the credit drag is real.
- **Batteries & EV Chain (SKC, SK IE Tech, L&F):** The epicentre of the bottom-left. Negative Energy and deep credit sensitivity. Higher oil hurts the EV demand narrative; wider credit spreads hit the capital-intensive battery build-out. Double macro headwind.
- **Semis (SK Hynix, LG Display, LG Innotek):** Deep credit sensitivity is the dominant factor. SK Hynix at -0.71 Credit is meaningful, though it carries +0.35 Risk Aversion which provides some vol offset.
- **SK Telecom:** The single best macro hedge in the KOSPI 200. +0.51 Energy, -0.01 Credit (essentially zero), +0.32 Risk Aversion. Benefits from oil, immune to credit, long vol. The cleanest Iran trade across any index.
- **Energy (S-Oil, GS Holdings, Korea Gas):** S-Oil at +0.34 Energy and +1.22 Risk Aversion is the vol-amplified oil play. GS Holdings and Korea Gas have cleaner credit profiles above the average.

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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