Message from Sevastopol:

Geopolitical Risk Analytics and Mitigation Methodologies

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Key points include:

- Geopolitical risk mitigation requires an urgent recalibration by global policy-makers to anticipate the cost to financial markets of sanctions, military actions, or even rhetoric.
- Most geopolitical-risk analyses are derived from manufacturing, mining, and energy production – i.e., industries with large fixed investments subject to expropriation, supply interruptions, and other risks resulting from sovereign actions. The geopolitical-risk paradigm for financial institutions and markets is analytically very different, derived not from fixed investments but rather from the lightening speed at which transaction volumes can change, margin requirements go up in response to ratings or similar actions that anticipate sovereign intervention, host-country governments seek to secure their financial markets through trans-border barriers, and other actions with systemic impact on a highly-interconnected industry that often does not know its aggregate exposure to key markets or counterparties.
- Global financial markets are even more vulnerable than usual to geopolitical risk since post-crisis accommodative monetary policy has distorted investment patterns and encouraged unusually large holdings in obligations subject to geopolitical risk and to counterparties with concentrated exposures. The shift from bank lending to capital-market structures has increased geopolitical risk in non-bank entities exempt from capital, liquidity, resolution and similar safeguards.

Geopolitical risk is a longstanding fact of life in financial markets and it is often the source of acute systemic distress. In recent months, geopolitical risk has raised its head in several venues (e.g., Venezuela, Nigeria), but it has not clearly posed systemic financial-market risk other than the long-simmering confrontation between China and Japan until the Cold War-like confrontation between Russia and the West over Ukraine. The Ukraine situation is a sobering reminder of how geopolitical events fought over issues like national borders, ethnic solidarity, and resource allocation can quickly explode into currency, commodity, and cross-border financial crises. To date, none of these factors has been reflected in stress testing or all of the prudential standards imposed on big banks in the wake of the financial crisis because repairs are focused on the causes of the crisis, all of which were financial, not geopolitical.

The Ukrainian case is critical not only in its own right, but also in the broader context of recent financial-market developments. Since the 2008 crisis, central banks – especially the Federal Reserve – have engaged in unprecedented accommodative policy. This has driven interest rates down to zero or, on a real basis, into negative territory. Investors have thus chased yield in an array of venues, many of them in emerging and peripheral markets particularly prone to geopolitical risk. Financial regulation aimed at yield-chasing to date has been focused on counter-cyclical cures to asset-price bubbles, neglecting the shocks that can quickly turn systemic if geopolitical risk hits an interconnected market or counterparty of size or complexity.

Further, much financing for high geopolitical-risk markets comes not from the bank loans that fueled the "LDC crisis" of the early 1980s and are the subject now of extensive prudential regulation, but rather from capital-market financing through sovereign bonds and related instruments. Many of these are held by asset managers and other non-banking institutions, expanding the ferocity of the "doom loop" that first showed itself with regard to EU debt held by banks in 2011.

Geopolitical risk is, thus, a systemic concern because:

- Some systemic banking organizations are housed in domains with significant geopolitical risk and/or have large banking- and trading-book exposures to high-risk venues and counterparties.
- Global finance is far more interconnected than ever before, meaning that even seemingly small nations can create significant fire-sale and contagion risk based on who is exposed to them or their integration into broader markets. Greece would not have been deemed systemic under prior geopolitical-risk analytics, but it of course proved to be. Few, if any, risk models anticipated the Ukraine crisis.
- Financial markets are now more than ever directly exposed to geopolitical risk due to their cyber-warfare exposure, risk exacerbated by the sharp increase in electronic payments and other trade instruments in the decade since the 2001 World Trade Center attack almost snuffed out the global financial system.
- "Shadow" institutions exempt from capital and liquidity safeguards have growing geopolitical exposure that could quickly create contagion risk with far-reaching macroeconomic impact.

SUMMARY TABLE

GEOPOLITICAL RISK SOURCES	SOLUTIONS
Sanctions	Concentration limits re market, liquidity, earnings risk Advance monitoring re targets to ensure compliance Legal, reputational risk planning re potential targets
Trans-Border Restrictions	Geopolitical recovery scenario development, stress testing Resolution options reflecting exogenous risk Authorized buffer use
Operational Risk	Restructured capital charge with more realistic geopolitical models Better recognition of geopolitical risk mitigants, including insurance, CDS not valued on mark-to-market basis in trading books when provided by capitalized counterparty Express buffers for geopolitical risk counted in overall capital-conservation buffer Recognized in counter-cyclical buffers to promote resiliency
Liquidity Risk	Incorporation of geopolitical risk in contingency-funding plans Central-bank planning for swaps, other facilities designed for geopolitical risk
Governance	Regular board review of geopolitical risk projections from internal, independent analysis Resolution planning, recovery scenario approval predicated in part on geopolitical resilience Subsidiary/affiliate recognition of geopolitical risk due to parent exposure

Next Steps:

For cross-border financial institutions:

- Map geopolitical risk against concentrated exposures
- Add geopolitical risk to stress-test scenarios
- Assess branch vulnerability in high-risk jurisdictions
- Review AML/sanctions watch-lists to ensure possible targets of sanction are identified in advance to ensure ready, complete compliance throughout world-wide operations subject to U.S., other sanctions

For financial innovators:

- Assess geopolitical-risk mitigation services. Are widely-used analytical tools current?
- Provide new models of geopolitical risk reflecting increased financial interconnectedness, other market factors and new products
- Offer new geopolitical risk-mitigation products capturing exposures not now offset by credit-default swaps, structured to win capital credit from regulators for operational-risk, stress-test purposes

For boards of directors:

- Question senior management, especially the chief risk officer: Are exposures correlated with geopolitical risk? How is this defined and measured? What mitigants are in hand? Which are needed?
- Does advocacy appropriately recognize emerging geopolitical risks and urge needed regulatory/policy change? If not, why not?

For government:

- Integrate geopolitical, military planning with financial regulation. In the U.S., Treasury's FSOC and the FRB, among others, should meet regularly with national intelligence experts to map sovereign and related risk exposures to counterparties deemed at high geopolitical risk, stress testing geopolitical scenarios against financial exposures to identify critical-impact points. Supervisory stress tests can be refined when it is determined that doing so does not compromise national security.
- Develop a system of geopolitical advisories for regulated, systemic financial institutions akin to current cyber-attack advisories. Ensure that doing so does not give certain institutions competitive advantage and expand the scope of covered entities where possible by application of federal standards that ensure confidentiality, other controls when alerts are provided.

For financial regulators:

- Recalibrate recovery and resolution plans for geopolitical scenarios
- Develop resolution methods that do not unduly penalize shareholders, unsecured creditors for exogenous risk resulting from geopolitical stress
- Reflect geopolitical risk far more clearly in the Basel rewrite of the operational-risk based capital rules now underway
- Recognize geopolitical-effective mitigants, including insurance
- Consider the effect of geopolitical risk not just on large banks, but also on financial-market infrastructure and non-bank institutions to ensure that geopolitical risk is not driven to "haven states" or housed in institutions without the capital, liquidity, or operational resilience to handle it

Do we know:

- How much financial risk is aggregated in high-risk venues or to high-risk counterparties based not just on intra-financial exposures, but also on loans to commodity providers, sovereign and related indirect obligations, and similar risks?
- How resilient is the financial-market infrastructure – e.g., central counterparties – to geopolitical risk if major counterparties will not honor obligations due to geopolitical dictates from their home or host governments?
- Whether analytics now understand not just how much counterparties can pay to honor their commitments, but also if they will pay under geopolitical stress and, if they don't pay, how much systemic risk results?
- Do geopolitical-risk models go beyond traditional models designed for host-country fixed investments to reflect current financial-market products, high-frequency trading, interconnectedness and other distinct characteristics?
- What is the extent to which non-banks can handle geopolitical risk given their exemption from most capital, liquidity, and operational-resilience requirements? For example, what would happen if an asset-management firm had significant emerging-market product offerings it felt compelled to support under stress?
- Is the strength of the U.S. dollar sufficient as a reserve currency to buffer geopolitical risk, especially given limits on the FRB's swap-facility powers in the wake of the Dodd-Frank Act? Is the Euro sufficiently resilient, especially for peripheral countries, or has the European Central Bank "shot its wad" given the huge liquidity facilities established to address the Continent's crisis?
- Are capital requirements the right way to mitigate geopolitical risk? If not, what about other mitigants, for example insurance?