



Managing Geopolitical Risk in Investment Decision-Making

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SUMMARY

East Asian neighbors squabble over the rights to tiny islands and territorial sea boundaries. Russia and NATO allies reenact Cold War-like air and naval encounters. The simmering cauldron of Middle Eastern tensions boils. A fanatical contingent of terrorist warriors claims Caliphate status for portions of Iraq and Syria. Ideological emulators swear allegiance from portions of Nigeria to the ashes of the Arab Spring. In the name of rabid philosophies, centrally directed and “lone wolf” imitators perpetrate barbaric acts of terrorism against innocent victims. Threatening the communications, power, and financial infrastructure of the modern world, cyber skirmishes proliferate.

Geopolitical risks clearly have risen in the early 21st century. A modified World Order, yet to be fully defined, looms. Classic capitalism has spawned numerous offspring with varying political and economic characteristics. Especially in an era of quickening technological change, ideological and theological differences breed disagreements among some nations.

Although not necessarily a core competency for many capital market practitioners, strategic and tactical portfolio management must reckon with geopolitical risk in its decision-making process.

This report defines geopolitical risk in a broad manner, lists major geopolitical events over the past century along with associated market reactions, looks at the strategic and current menu of geopolitical risks, addresses investment decision-making in light of such evolving geopolitical risks, and posits potential high impact and high-likelihood geopolitical risk developments over the next decade to 2025.

As this young 21st century unfolds, geopolitical risk ascension could become the next economic derailer. Despite similarities, no two business cycles are perfectly congruent. The excesses of systemic financial leverage, partially manifest in novel and imperfectly-designed structured products that catapulted the global economy into the Great Recession of 2007-2009, unlikely will serve as the main tripwires for the next major world economic contraction in our view.

The opinions expressed here are those of the authors and do not necessarily reflect the positions of The Bank of New York Mellon Corporation.



BNY MELLON

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INTRODUCTION

Investors must make numerous decisions on a daily basis. Most of these portfolio construction decisions pertain to currency preferences, inter-asset class allocation, intra-asset class allocation, issuer selection, and security selection. A torrent of economic, industry, and issuer information flows guide portfolio managers' decisions. Healthy portfolio performance and careers can be built on operating exclusively within traditional macroeconomic and microeconomic boundaries.

Yet, this classic approach to portfolio management often neglects an extremely important factor: the rigorous consideration of geopolitical developments. Over the course of a hopefully lengthy portfolio management career, geopolitical events almost certainly will seep occasionally into local and even global capital market valuations. In our opinion, the very best investors will seek to minimize portfolio risks and to harvest potential distressed situation rebounds through a thorough incorporation of geopolitical risks into the investment decision-making process.

Just as offenders cannot claim ignorance of the law as a justification for mischief, the stewards of portfolio management cannot justify a failure to include geopolitical considerations into their investment calculus. Such decision-making faults historically have been rationalized by assertions about the impossibility of avoiding unanticipated geopolitical events and transacting accordingly. For example, if national intelligence agencies can fail on occasion, then how can awful tragedies like 9/11 be anticipated by even the ablest asset managers?

True enough. The most ardent students of geopolitical developments cannot expect perfect clairvoyance. But for every wholly unexpected geopolitical lightning bolt, there will be numerous occasions where competent geopolitical diagnostics will benefit portfolio performance in our opinion.

Moreover, the inclusion of geopolitical analytics into the investment decision-making process provides many collateral benefits. The resulting enlargement of the macro framework may unveil financial system themes and connections not previously apparent. And in some asset classes like commodities, the construction of plausible price scenarios, say for oil, would be seriously deficient without reference to geopolitical developments.

Under different nomenclatures, geopolitical events are as old as humanity. Like almost all trends in nature and in the social sciences, the potency of geopolitical risks ebb and flow. After a long 20th century that witnessed the erasure of fascism and communism, the 1990s were an exceptional decade of post-Cold War bliss attended by hopes for a long epoch of comparative global tranquility. These aspirations have been fading since 2000. To many observers, the world now looks more unsettled than at any time since the last stages of the Cold War in the late 1980s.

As a result, financial market wariness of geopolitical risks has risen during the early 21st century. And for good reason. Virtually nothing can slam an economic outlook and investment portfolio more suddenly than adverse and often largely-unpredictable geopolitical developments.

Structurally based on the Treaty of Westphalia (1648), the present World Order morphs at warp speed. As the 20th century international framework rapidly recedes, the 21st century world structure beckons but cannot yet be fully discerned. Emerging economy ascendancy collides with advanced economy stagnation despite rapid technological change. The post-Cold War serenity of the 1990s has been lost in the shards of 9/11, in the sands of Iraq, in the valleys of Syria, in the mountains of Afghanistan, in the plains of Ukraine, in the jungles of Nigeria, in the seas of East Asia, and in the offices of a French satirical magazine, Charlie Hebdo. After two decades of participating in Middle East wars, a fatigued US backpedals from major military conflicts. These world conditions have invited multiple entities to pursue enlargement of their influence and even territories.

Recidivist ideological, ethnic, tribal, and religious animosities have been unleashed from time capsules in the early 21st century. Ancient boundaries have been re-asserted in parts of Eastern Europe, the Middle East, and East Asia. With non-border specific challenges like climate change, human capital migration, and trade policy on the rise, the need for global cooperation has never been greater.

The Great Recession and its prolonged aftermath challenge the supremacy of Western Consensus economic doctrine and perhaps even liberal democracy. Privacy fears escalate in the face of burgeoning security concerns and the growing abilities of new technologies and big/smart data techniques to both inform and to wreak cyber-attack havoc.

In the middle of the second decade of this century, the “ISIL/ISIS Caliphate” rapidly absorbs large chunks of Iraq as well as Syria and threatens extinction to non-believers. Relations between Russia and the West deteriorated as Russian troops entered Ukraine to render “humanitarian assistance” to Russian separatists and to assimilate Crimea. Reciprocal sanctions escalated, to the detriment of Russia’s economy. The international community continues to fret about Iran’s pursuit of nuclear weapons and hope of a containment deal. The cease-fires in Gaza between Hamas and Israel collapsed again and again, prolonging this tragic conflict. North Korea’s behavior and intentions remain difficult to decipher. Scotland even contemplated a divorce from the U.K. Pro-democracy demonstrators in Hong Kong seek greater autonomy from China’s central government in Beijing. The Ebola virus enveloped certain Western African nations and threatened to achieve pandemic status.

Many of these adverse geopolitical developments do not look amenable to rapid resolution and may overhang markets for many months and years to come in our opinion. The unfolding realignment of the World Order may span decades.

Foolproof geopolitical risk detection and remedies do not exist. The outcomes of elections often surprise as does the subsequent course of political and economic policymaking. Coups, fires, hurricanes, cyclones, tornadoes, and earthquakes randomly strike without warning. In a world of 7.2 billion people, an infinitesimally small slither can resort to heinous terrorist activities in an attempt to further their causes. And the battlefield of the 21st century has expanded to include cyberspace. Reminiscent of the Cold War, daily electronic jousting among major powers has become commonplace. These “official electronic incursions” have been supplemented by the activities of rogue hackers seeking to solve mighty cryptographic puzzles and by criminal entities in pursuit of ill-gotten gains. Target, Home Depot, J.P. Morgan, and Sony are among many firms to have been technologically breached. More firms in the future will no doubt discover that their operations have been monitored surreptitiously by uninvited third parties.

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Operating in an adjacent but inter-related realm, capital markets often appear complacent to outright indifferent about geopolitical risks.

BRIEF TOUR OF GEOPOLITICAL RISK HISTORY

By their nature, geopolitical events are often sudden and surprising. On the brink of World War I in July 1914, few if any diplomats, let alone investors, envisioned the end of the Russian, German, Austria-Hungarian, and Ottoman monarchies within just a few years.

The World Order of the early 20th century proved more fragile than commonly perceived at the time. Massive military forces with vast arsenals have not always been needed to trigger geopolitical shifts. A single individual or a small group can initiate history-altering changes through such actions as assassinations and revolutions.¹

Operating in an adjacent but inter-related realm, capital markets often appear complacent to outright indifferent about geopolitical risks. Again and again, capital markets' chaotic reactions to familiar geopolitical problems puzzle. Although 9/11/2001 surprised all, Muslim extremists bombed the underground parking garage of the World Trade Center in 1993. Islamic terrorists, operating in Taliban-controlled Afghanistan territory, declared their intent to strike the West in 1996 and 1998. Some form of attack was expected by experts. For example, the front cover of *Foreign Affairs* in the November/December 1999 issue cited two articles, "The Taliban: Exporting Extremism" and "Kashmir: Fundamentalism Takes Root." And Marshall Goldman presciently commented on "Putin's Power Grab" in the November/December 2004 issue of *Foreign Affairs*.

In varying guises, geopolitical risk has been around for millennia. In the time of ancient Greece, Mediterranean merchants would have been familiar with the risks of trading among different city states. Alexander the Great's conquest of much of the known world over the first half of 300s BCE posed a formidable geopolitical risk from the Danube to India. As Marco Polo and his adventurous family knew in the 13th century, the prosperity of traders along the famed Silk Road varied by location. Distinct trading practices in Bukhara and Samarkand, now parts of modern Uzbekistan, would have been dictated by local authorities.

As synthesized in Adam Smith's "An Inquiry into the Nature and Causes of The Wealth of Nations" in 1776, economists have long endeavored to seek policies that promote national prosperity. Drawing upon this tradition, comparative international economics has been a core discipline of the economic profession for the past three centuries.²

Almost two centuries ago, European capital assumed geopolitical risk by helping to finance some of the 19th century infrastructure, especially the canals and railroads, of the United States and parts of Latin America and Asia.

Economists have regularly crossed directly into the geopolitical theatre, perhaps most famously by John Maynard Keynes in his searing and correct critique of the 1919 Paris Peace Conference in "The Economic Consequences of the Peace Following World War I." As Keynes predicted, the excessive and unrealistic reparations imposed on Germany helped lay the groundwork for World War II.

1 Gavriolo Princip's assassination of Archduke Franz Ferdinand and his wife on June 28,1914 sparked the Great War.

2 Even today in the 21st century, much of comparative international economics ignores the real essence of geopolitical risk in the way of wars, crises, and national security. Comparative political economy considers issues like political party impact on economy, but geopolitical risk is usually exogenous in international economics as taught today.

The term, “geopolitical risk (GPR),” has been bandied around a lot in markets since 9/11/2001. First coined by the Swedish political scientist, Rudolf Kjellén in 1916, to consider the role of geography in international relations, the term has expanded in the early 21st century, certainly among capital market practitioners, to include domestic political events like elections and policymaking, health crises like SARS, Avian flu, and Ebola, and even natural disasters such as hurricanes and earthquakes. The political response to natural calamities can exacerbate (New Orleans’ Hurricane Katrina, Japan’s Fukushima) or mitigate sovereign economic and market after-effects.

Conceptually, GPR is now used in some quarters to describe almost any event where politics or policies might disrupt efficient economic or market function. Acknowledging this progressive conceptual enlargement of geopolitical risk, a better term to characterize these extraordinary, often exogenous shocks, might be “Non-Economic Market Risks” or NEMRs.

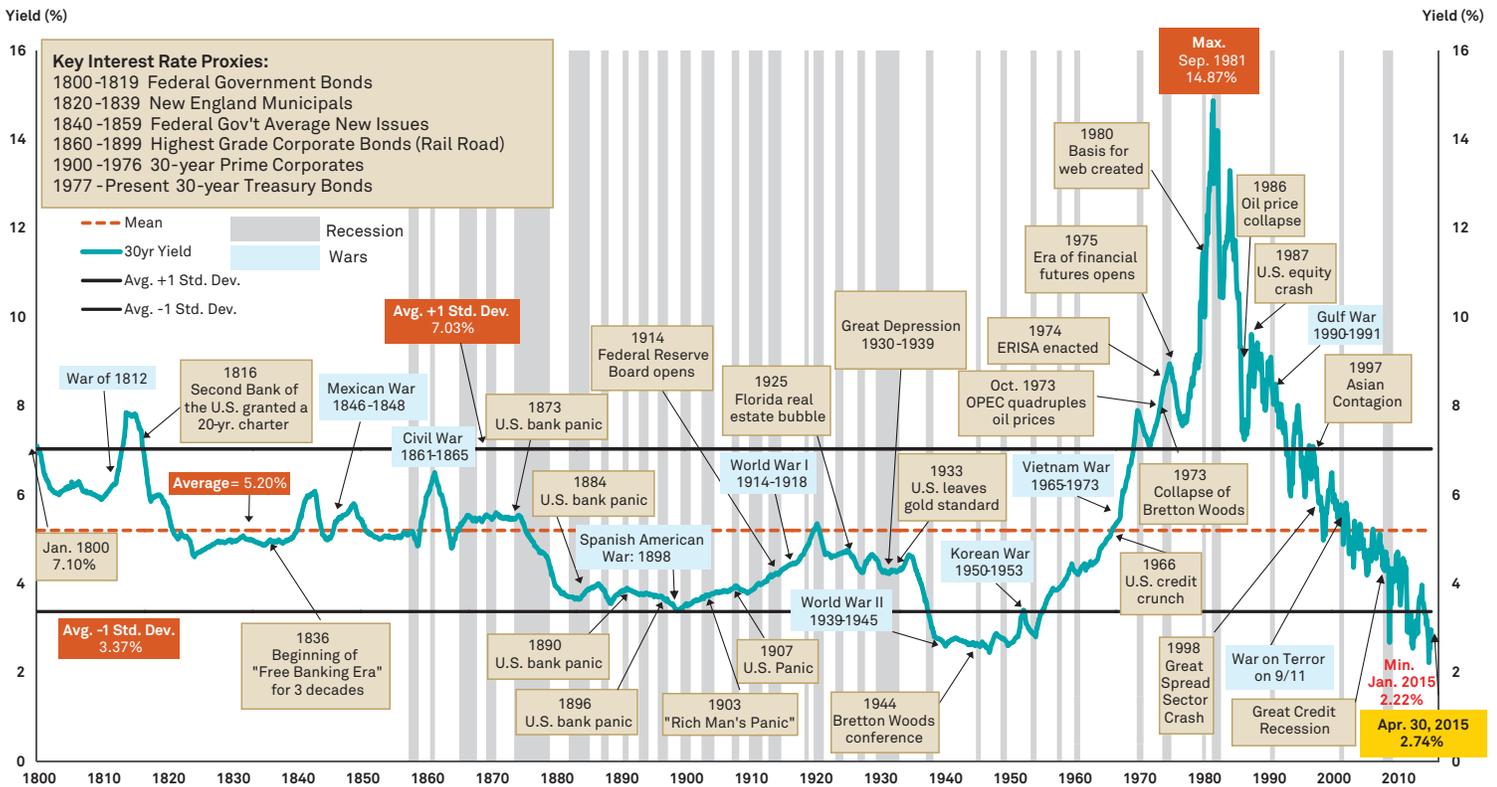
Geopolitical events seep into the markets through multiple channels. For example, the propellant of rapid oil price increases is often associated with geopolitical events such as regional conflicts in the Middle East (e.g. Arab Oil Embargo in 1973) or episodic fluctuations in diplomatic relations between the East and West. The Russian ruble (-36%) and equity market (-28% in USD) fell considerably by April 30, 2015 from January 1, 2014. And as shown in Figures 1 and 2, geopolitical risk shocks often dampened US interest rates and chilled equity valuations, especially during war periods.

The globalization of capital markets, on hold with the start of World War I and the prolonged debilitating effects of the Great Depression in the 1930s, resumed after World War II’s conclusion in 1945, and increased the need for sound geopolitical analyses. By the late 1970s, in accordance with the accepted dogma of modern portfolio theory, many investors had increased their allocations to debt and equity securities issued by non-local governments and firms. And growth-minded sovereigns began to aggressively market debt beyond their borders. For example, World Bank statistics show that foreign ownership of public and publicly guaranteed debt increased from \$44.1 billion in 1970 to \$2.0 trillion in 2013 (an increase of 6.4x in constant 2013 dollars).³

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3 Statistics available from the World Bank at <http://data.worldbank.org>, accessed March 2015.

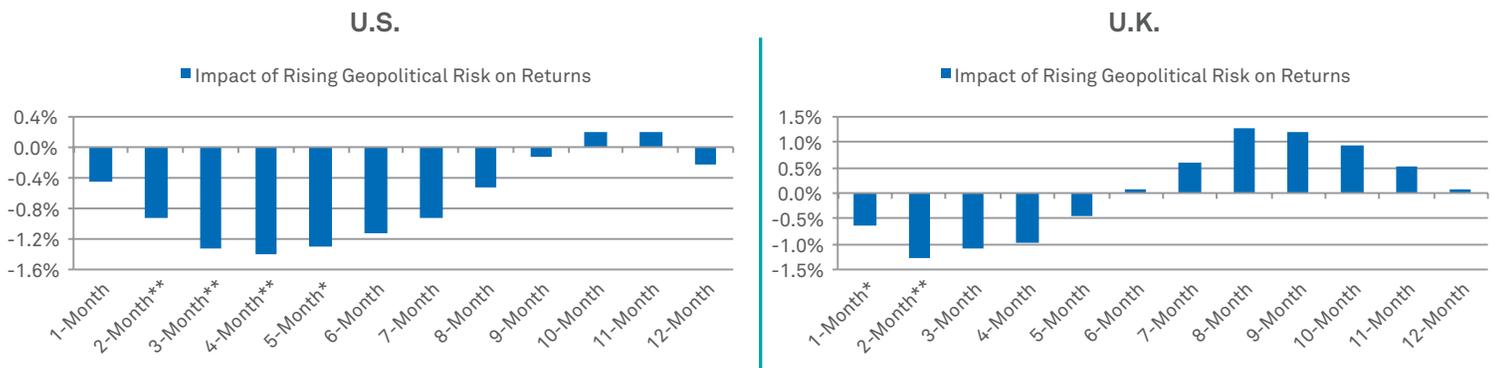
Figure 1. A History of Long-Term US Interest Rates, US Recessions, and World Military Conflicts: 1800 to April 30, 2015



Source: BNY Mellon using data from Global Financial Data, Bloomberg, and NBER

The end of the Cold War in 1989 sparked the freest movement of people and capital in the three quarters of a century since the start of World War I in 1914. This augmented the need for many businesses and investors to operate in a global context mindful of geopolitical risk. In the spirit of post-Cold War triumphalism, the exciting, almost intoxicating promise of global capitalism was heralded in popular treatises such as Tom Friedman’s “The Lexus and the Olive Tree” (2000). In addition to raising living standards, the celebrants of global capitalism claimed liberty and democracy as collateral benefits. But as seen in the Asian Financial Crisis of 1997-1998, the resulting rapid capital movements springing from increased globalization ironically were destabilizing and contributed to heightened geopolitical risk for economies accustomed to a slower pace of change. Indeed, as profiled in Martin Wolf’s “The Shifts and the Shocks” (2014), the virtues of globalization may undergo recidivist interpretations in the early 21st century.

Figure 2. Impact of Increased Geopolitical Risk on Equity Returns: 1901 to 2010¹



Note: Geopolitical risk defined here is a binomial variable that increases when the number of ongoing disputes in a given month period is above the 12-month moving average of global disputes based on data from Militarized Interstate Disputes dataset. Change in returns calculated on a forward monthly rolling basis, and charts reflect the marginal or incremental impact that an increase from 0 to 1 (an increase in geopolitical risk) has on forward returns. Analysis shows that historically, increased geopolitical risk was consistent with a headwind for equity returns, in both the US and U.K., over one to four months. Statistical significance designated by *= $p < 0.10$ and **= $p < 0.05$.

¹2010 was the last year Militarized Interstate Dispute was coded by Glenn Palmer, Vito D’Orazio, Michael Kenwick, and Matthew Lane. “The MID4 Data Set: Procedures, Coding Rules, and Description.” Conflict Management and Peace Science. Forthcoming. Data is available at <http://correlatesofwar.org/data-sets/MIDs/mids>. US equity returns calculated from Dow Jones Industrial Average. U.K. returns from Global Financial Data using the following method: “Bank of England shares exclusively from April 1874 to 1922. From 1923 until 1929, an index of stock yields using 5% as the base was used, and from 1930 on actual dividend yields are used. Yield data from 1923 until the present were calculated by the Actuaries for a broad index of shares. The stock price index uses the Banker’s Magazine Index of All Variable Dividend shares from 1922 until 1932, the Actuaries General Share index from 1932 to 1962 and the All-Share index from 1964 on. The Financial Times now calculates a total return index; however, this index only dates back to 1992.”

Source: BNY Mellon using data from Global Financial Data, Bloomberg and Correlates of War. Past performance is no guarantee of future results.

GEOPOLITICAL RISK IN THE EARLY 21ST CENTURY

In his masterpiece, *The Structure of Evolutionary Theory*, the late Stephen Jay Gould argued for the application of his concept of “punctuated equilibrium” to economics and political science.⁴ The “Global Order” in the Teens now exhibits rapid change in search of the next relative steady state consistent with the theory of punctuated equilibrium.

In the early 21st century, great geopolitical risks abound. Cyber-attacks border on acts of war. Vital natural resources, such as oil and fresh water, are frequently concentrated in unstable areas.

Governments and global organizations will have to proceed wisely to avoid conflicts. Like Britain from the Victorian era through the onset of World War I, the US holds a hegemonic geopolitical leadership position that is susceptible to exhaustion-induced retrenchment after operating on the front lines of the Middle East since 2001. This leadership position imposes many responsibilities and complexities in an increasingly multipolar world.

⁴ Gould, Stephen Jay. *The Structure of Evolutionary Theory*. Cambridge, MA: Belknap of Harvard UP, 2002, p. 977.

The Iraq invasion of Kuwait in 1990 and 9/11 tragedy in 2001 elevated capital market focus on geopolitical risk.

The stakes are high. Walter Russell Mead wrote in 2007 *With God on Our Side: American Apocalypse and the Mall at the End of the World*, "As the twenty first century progresses, fears of mass destruction and the end of the world will become more prevalent even than during the Cold War. There will be more and more actors capable of wielding more and more weapons of mass destruction."⁵

Mead's not a doomsayer, he also wrote, "just as the 20th century unleashed good and evil beyond the ability of 19th century humanity to comprehend or cope with, so too the twenty first century will witness unimaginable blessings and horrors. With bodies and even souls remade by the marvels of genetic engineering and the fusion of the biological and mechanical kingdoms, our descendants may inhabit mental and physical universes only dimly imagined today."⁶

The US and key allies may have the means to head off a possibly problematic course in world affairs. But in so doing, the US and like-minded nations must guard against the perception of hegemonic hubris, a concern shared even by some of the staunchest European allies of the US and clearly an irritation to Mr. Putin's Russia. Indeed, the greater geopolitical good might be better served by improved multipolar cooperation.

GEOPOLITICAL RISK ANALYSES

Especially since the mid-1960s, the explosion of capital market globalization spawned the formation of sovereign analytical teams by export development banks, multinational businesses, investors, broker-dealers, rating agencies, independent research boutiques (typically operating in either political economic, equity, or credit arenas), and specialist insurers. Historical economic, political, demographic, and quality-of-life statistics were parsed. Bhutan even pioneered the concept of a Gross National Happiness Index. Qualitative rankings were assigned and debt and equity capital was invested according to the classic principles of formulating expected risks and returns.

The Iraq invasion of Kuwait in 1990 and 9/11 tragedy in 2001 elevated capital market focus on geopolitical risk. In the aftermath, many capital market institutions privately fretted about the possibility of the deployment of weapons of mass destruction. Little noted in our opinion, the desire by official economic policymakers to combat this geopolitical gloom in the early Oughts through generous monetary accommodation arguably contributed to the depth and breadth of the ensuing Great Recession of 2007-2009.

At the top of the global business expansion in the mid-Teens, geopolitical considerations again have moved to the forefront of macro market analysis. Russia's seizure of Crimea in 2014 arguably reignited the Cold War and partially distracted markets from their obsessive focus on central bank activities. Exhausted from decade-long engagements in the Iraq and Afghanistan conflicts and committed to incapacitating the ISIL terrorist group, a war-weary United States pivots toward the embrace of a world encouraged and inclined to share the global policing burden.

5 Mead, W., Kissinger, H., and Samuel Shah. "With God on Our Side: American Apocalypse and the Mall at the End of the World." Council on Foreign Relations, 2007, p.25

6 Mead, W., Kissinger, H., and Samuel Shah. 2007.

GEOPOLITICAL RISK BIOLOGICALLY AND SYSTEMICALLY INHERENT

In our Darwinian world, all living things compete and evolve. This fundamental natural law spurs progress. The same process governs the evolution of nations and institutions. In the perpetual contest for winners and losers, competitive tensions will surface.

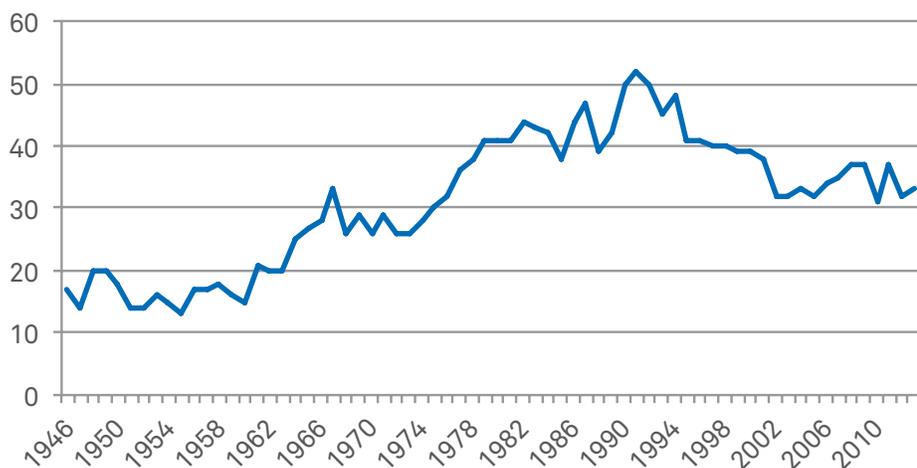
According to the United Nations, 193 nations span the globe in the early 21st century. An even greater number of languages (approximately 7,000 according to BBC), political ideologies, and religious beliefs shape the conduct of nations, institutions, groups, and individuals.

Disagreements among distinct factions regularly occur. On the nation level, such disagreements can spark diplomatic rows and even ignite armed hostilities. On the group level, societal outliers may express their ignored opinions through terrorist actions.

Given the large set of competing opinions, high-friction hotspots almost continuously exist somewhere in the world as shown by the number of ongoing armed conflicts in Figure 3. Fortunately, most of these hotspots are relatively small and have little effect on even local economies and markets. But with disturbing frequency, more substantive tensions spill over into regional and global markets approximately every 2.3 years as displayed in Figure 4.⁷ This exhibit also shows that the years between the start of major wars has declined from 18 years to 2 years over nearly two centuries from 1823 to 2003 (last year dataset was updated).

With disturbing frequency, more substantive tensions spill over into regional and global markets approximately every 2.3 years.

Figure 3: Ongoing Armed Conflicts: 1946-2013¹



Note: Uppsala Conflict Data Program PRIO Armed Conflict Dataset defines armed conflict as intra-, extra-, or inter-state conflict resulting in 25 battle deaths.

¹2013 was the last year that the PRIO data was updated.

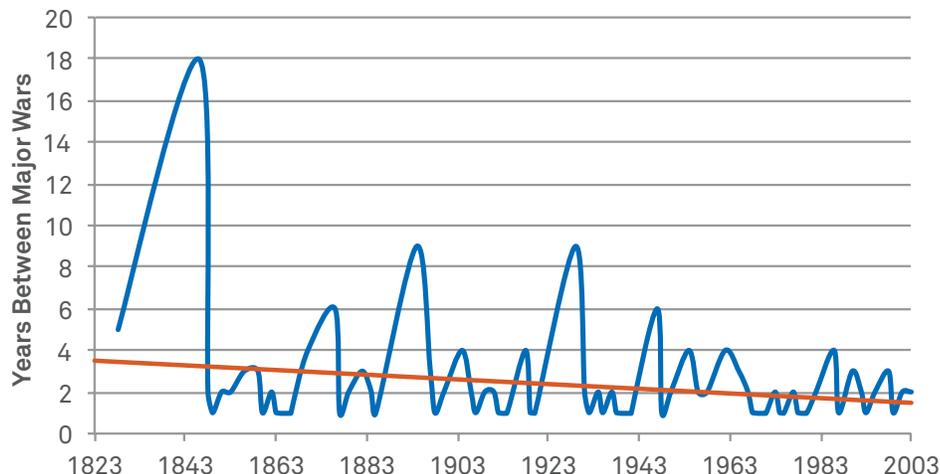
Source: BNY Mellon using data from Uppsala University Conflict Data Program, Nils Petter Gleditsch, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand, Armed Conflict 1946-2001: A New Dataset. *Journal of Peace Research* 39(5), 2002.

Overlaid on this turbulent geopolitical landscape, shifting demographics augment the complexity of risk analyses. Populations in many developed countries are shrinking or growing at low rates. Meanwhile, population expansion is soaring in the developing world from Africa to the Middle East to South Asia. The maintenance of political stability in the face of rapid population growth has historically proved difficult and may be too much to hope for in many of these areas.

⁷ 2.3 years was calculated averaging the years between the start of major wars in Figure 4.

Despite the chronic threat of sudden disruption, many capital market practitioners regard geopolitical risks as interesting but unavoidable fuzzy background noise.

Figure 4: Years Between Start of Major War: 1823-2003¹



Note: Correlates of War Project Defines major war as an inter-state conflict with at least 1,000 battle deaths within a 12 month period.

¹2003 was the last year Correlates of War data was updated.

Source: BNY Mellon using data from Correlates of War Project, Meredith Reid Sarkees and Frank Wayman, *Resort to War: 1816 – 2007*, Washington DC: CQ Press, 2010

Despite the chronic threat of sudden disruption, many capital market practitioners regard geopolitical risks as interesting but unavoidable fuzzy background noise. The disciples of this hands-off approach argue that even national intelligence agencies frequently fail to anticipate major geopolitical shocks. Other than to discard negatively-affected sovereigns and their main debt and equity issuers, clear portfolio doctrine has not been devised on how best to cope with geopolitical risks. Moreover, institutions less inclined to actively follow geopolitical risks argue that even semi-efficient markets largely price in geopolitical perturbations. In their view, compelling anticipation and post-event reaction strategies may not exist. Our accompanying figures (Figure 5, Figure 6, and Figure 8) suggest there may be some reason to revisit this fatalistic premise. While many geopolitical risks may exert a modest impact on markets, geopolitical risk developments historically generate negative returns, at least in the short run, for risky assets (debt and equity).

During the Korean War, the US equity market shed almost -12.0% from June 23, 1950 to July 13, 1950. The Berlin Blockade that began in mid-1948 triggered an -8.5% decline in US equities, while the 1973 Oil Embargo led to a sell-off of almost -17.9% from October 18, 1973 to December 5, 1973. Market reactions are most significant when the event represents a large geopolitical risk, which generates an average return of -3.5% for the Dow Jones Industrial Average over 1914-April 30, 2015. Figure 6 shows the average performance of the S&P 500 in the 30 days following the start of 67 geopolitical crises that involved the US Equity markets rarely price in crises over a single day. While the first day's decline is the largest, US equity markets on average continue declining over the subsequent four days before beginning an upward trend. The sale of the S&P 500 on day two through five preserved an average of 40 basis points and buying on day five generated an average 100 basis point return over the subsequent 25 days.

There has been little formal consideration of geopolitical risk in the *Journal of Portfolio Management*, *Financial Analysts Journal*, and the *Journal of Finance*. And yet, the commonplace eruptions of geopolitical risk often affect markets and portfolios. Figure 7 shows the abnormal tail risks associated with geopolitical events. The probability of significant underperformance in 30-day returns increases while the probability of outperformance decreases.

Figure 5. US Equity Reactions to Key Geopolitical Events: 1914 through April 30, 2015

Crisis Grade	Event	Market Reaction Dates	Date Range Gain/Loss (%)	Cumulative Dow Jones Industrial Performance (%) After Reaction Dates		
				22 Days	63 Days	126 Days
Geopolitical Events						
A	World War I	7/28/1914 - 11/11/1918	14.92	-5.93	-6.70	0.86
A	Pearl Harbor	12/06/1941 - 12/10/1941	-5.94	1.79	-2.29	-10.04
A	Korean War	6/23/1950 - 7/13/1950	-11.99	7.70	13.68	15.96
A	Cuban Missile Crisis	10/19/1962 - 10/27/1962	-0.74	10.89	14.48	15.94
A	Gulf of Tonkin Incident	8/2/1964 - 8/7/1964	-1.42	1.20	5.90	4.24
A	Arab Oil Embargo	10/18/1973 - 12/05/1973	-17.86	7.95	4.61	7.03
A	Gulf War Ultimatum	12/24/1990 - 1/16/1991	-4.29	12.03	14.47	16.00
A	Attack on World Trade Center and Pentagon	9/11/2001-9/30/2001	-7.89	5.98	11.35	11.98
A	Egypt Coup d'etat & Crackdown	7/3/2013-08/23/2013	0.15	2.44	3.73	9.78
A	Russia Invades Crimea	2/28/2014 - 3/4/2014	0.45	-0.77	0.03	3.12
B	Fall of France	5/09/1940 - 6/22/1940	-17.25	-0.80	2.23	6.97
B	Berlin Blockade	06/24/1948 - 05/12/1949	-8.47	-4.27	-0.64	4.27
B	France Falls at Dien Bien Phu	3/13/1954 - 5/8/1954	6.51	1.86	6.05	8.21
B	Soviet Invasion of Hungary	11/04/1956 - 11/10/1956	-1.04	-2.59	1.74	-2.28
B	Sputnik	10/03/1957 - 10/22/1957	-9.88	2.45	2.22	4.07
B	China Cultural Revolution	05/16/1966 - 10/06/1976	10.62	-0.74	0.37	-2.69
B	Six-Day War	06/05/1967 - 06/10/1967	3.20	-1.67	5.23	4.95
B	Soviet Tanks Invaade Prague	8/20/1968 - 10/28/1968	7.77	0.94	-1.32	-5.13
B	Yom Kippur War	10/6/1973-10/25/1973	0.33	-8.53	-12.67	-11.69
B	Fall of Vietnam	04/30/1975 - 05/01/1975	1.17	0.11	4.91	0.88
B	Iranian Revolution	1/16/1979 - 2/11/1979	-1.58	0.80	5.85	2.54
B	U.S.S.R. Invasion of Afghanistan	12/24/1979 - 1/03/1980	-2.25	6.80	0.95	-0.62
B	Falkland Islands War	4/01/1982 - 5/07/1982	4.32	-5.71	-6.34	4.33
B	U.S. Invades Grenada	10/24/1983 - 11/07/1983	-2.73	5.96	5.88	-4.90
B	Invasion of Panama	12/15/1989 - 12/20/1989	-1.88	2.71	-3.88	-0.80
B	Iraq Invades Kuwait	08/02/1990 - 08/04/1990	-1.92	-9.85	-10.64	-7.81
B	Coup Attempt Against Gorbachev	8/16/1991 - 8/19/1991	-2.36	2.92	5.60	4.30
B	World Trade Center Bombing	2/26/1993 - 3/1/1993	-0.46	3.17	2.71	3.83
B	Oklahoma City Bombing	4/19/1995 - 4/20/1995	0.55	4.73	8.49	8.27
B	Kosovo War	02/28/1998 - 06/11/1999	22.76	6.18	4.61	-4.49
B	U.S. Invades Iraq	3/19/2003 - 12/21/2011	46.11	3.00	6.86	8.12
B	U.S. Invades Afghanistan	10/07/2001-06/22/2011	32.78	2.70	-6.52	-1.99
B	Battle of Baghdad	03/20/2003 - 04/15/2003	-17.52	1.88	10.96	12.22
B	Madrid Train Bombings	03/11/2004 - 03/12/2004	1.10	2.25	-2.22	-0.98
B	London Subway Bombings	7/7/2005 - 7/8/2005	1.43	1.84	2.20	2.27
B	Russo-Georgian War	08/07/2008 - 08/12/2008	1.85	-0.94	-20.03	-23.35
B	Mumbai Attacks	11/26/2008 - 11/29/2008	1.17	-2.83	-9.38	-9.19
B	Arab Spring (Tunisia)	12/17/2010 - 01/14/2011	2.57	2.59	0.60	6.15
B	Libyan Civil War	02/15/2011 - 10/23/2011	-3.42	2.29	4.11	9.94
B	Benghazi Attack	09/11/2012 - 09/12/2012	0.07	1.82	-5.72	1.33
B	Boston Marathon Bombings	04/15/2013 - 04/19/2013	-0.35	3.92	1.73	3.18
B	Syria Chemical Attack Allegations	08/21/2013 - 09/26/2013	2.89	0.47	5.02	3.39
C	Easter Rebellion in Ireland	4/14/1916 - 6/30/1916	-2.24	-0.47	1.80	18.64
C	Bloody Sunday (N. Ireland)	11/21/1970 - 11/30/1970	3.99	-11.86	-0.74	0.16
C	U.S. Bombs Cambodia	4/29/1970 - 5/26/1970	-14.41	11.85	15.89	20.55
C	Beirut Barracks Bombing	10/23/1983-10/24/1983	0.01	-0.08	0.12	-5.53
C	U.S. Bombs Libya	4/15/1986 - 4/21/1986	2.56	-3.80	0.45	0.86
C	Argentina AMIA Bombing	07/18/1994-07/19/1994	-0.19	0.49	3.22	-1.89
C	Poison Gas Attack in Tokyo Subway	3/20/1995 - 3/21/1995	-0.27	3.07	8.93	15.76
C	U.S. Embassy Bombings in Nairobi and Dar es Salaam	8/07/1998 - 8/10/1998	-0.27	-8.72	-6.69	1.41
C	USS Cole Bombing	10/12/2000 - 10/13/2000	1.57	6.14	2.38	5.96
C	2002 Bali Bombings	10/12/2002-10/13/2002	0.00	9.19	7.43	0.75
C	Haiti Earthquake	01/12/2010 - 01/13/2010	0.50	-6.35	0.50	-2.21
C	Kenya Mall Attack	09/21/2013 - 09/24/2013	-0.75	0.26	4.81	3.87
C	Marakesh Market Bombing	04/28/2011-04/29/2011	0.37	-2.33	-1.78	-12.26
C	French Intervention in Mali	1/11/2013-7/15/2014	26.48	-3.62	0.42	3.68
C	Boko Haram's Abduction of Nigerian School Girls	04/14/2014-04/15/2014	0.55	1.57	3.36	4.04
C	2014 Hamas-Israel Conflict in Gaza	7/8/2014-8/26/2014	1.18	0.29	-0.59	5.12
C	Ebola Virus Outbreak	03/21/2014-Present	8.51			
Political/Economic Events						
1	U.S. Stock Market Crash of 1907	10/28/1929-10/29/1929	-11.73	4.85	8.00	18.88
1	JFK Assassination	11/21/1963 - 11/22/1963	-2.89	6.84	10.06	14.68
1	Kent State Shootings	5/04/1970 - 5/14/1970	-4.17	1.50	5.64	10.64
1	Nixon Resigns/Watergate	8/9/1974 - 8/29/1974	-15.50	2.12	1.32	-3.78
1	U.S. Stock Market Crash of 1987	10/02/1987 - 10/19/1987	-34.16	8.02	14.47	17.34
1	Orange County, CA Bankruptcy & Financial Crisis	12/06/1994 - 12/31/1994	2.36	0.91	4.05	13.27
1	Lehman Bankruptcy/Great Recession	09/15/2008 - 06/30/2009	-22.63	5.14	10.22	15.68
1	Wikileaks	10/28/2010-11/4/2010	2.89	-3.00	2.30	4.81
2	Earthquake in Tokyo	9/1/1923-9/15/1923	-4.10	-0.25	0.78	7.42
2	Truman Upset Victory	11/02/1948 - 11/10/1948	-8.34	-0.19	3.89	0.90
2	Riots and Labor Strike in France	5/6/1968 - 5/26/1968	-2.10	0.91	-0.76	4.30
2	Hunt Silver Crisis	2/13/1980 - 3/27/1980	-15.92	0.45	11.35	23.07
2	ERM U.K. Currency Crisis	9/14/1992 - 10/16/1992	-5.98	2.07	4.37	4.66
2	Mexico - Tequila Crisis	12/19/1994 - 12/31/1995	34.99	2.00	8.20	7.05
2	Terrorist Attack in Paris Metro	7/25/1995 - 7/26/1995	-0.16	-1.62	1.17	8.47
2	Asian Stock Market Crisis	10/07/1997 - 10/27/1997	-12.44	6.84	8.82	19.40
2	Russian LTCM Crisis	8/18/1998 - 10/08/1998	-11.28	11.13	14.35	21.10
2	South Ossetia War	08/07/2008-08/12/2008	1.85	-0.94	-20.03	-23.35
2	Occupy Wall Street Protests	09/17/2011-01/01/2012	6.16	4.02	6.22	6.72
2	Snowden NSA Leaks	06/05/2013-01/01/2014	10.80	-2.29	-1.31	-0.35
Overall						
Mean			-0.29	1.42	2.58	4.21
Median			-0.19	1.68	2.55	4.16
Geopolitical Events						
Mean			1.17	1.07	1.86	2.71
Median			0.07	1.68	2.21	3.29
Political Events						
Mean			-4.62	2.43	4.66	8.55
Median			-4.13	1.75	5.01	7.94
High Geopolitical Risk Events (A)						
Mean			-3.46	4.33	5.93	7.48
Median			-2.85	4.21	5.25	8.40
Medium Geopolitical Risk Events (B)						
Mean			2.38	0.73	0.28	0.73
Median			0.44	1.85	1.97	2.40
Low Geopolitical Risk Events (C)						
Mean			1.62	-0.29	2.47	3.68
Median			0.37	0.09	1.15	2.54
U.S. Political/Economic Events (1)						
Mean			-10.73	3.30	7.01	11.44
Median			-7.95	3.48	6.82	13.97
Non-U.S. Political/Economic Events (2)						
Mean			-0.54	1.84	3.09	6.62
Median			-3.10	0.68	4.13	6.89

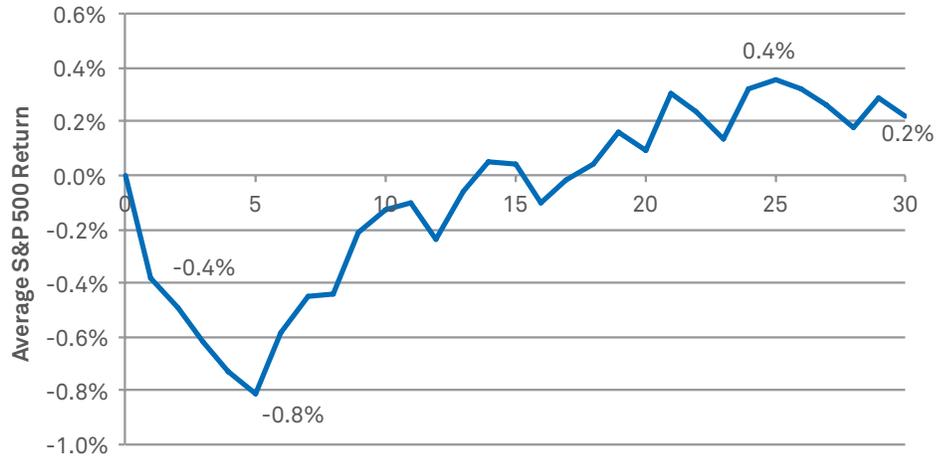
Crisis Code Key*
A-High Geopolitical Risk
B-Medium Geopolitical Risk
C-Low Geopolitical Risk
1-U.S. Political Crisis
2-Non-U.S. Political Crisis

*Crisis Code Key is determined on a subjective basis.

Source: BNY Mellon using data from Bloomberg. Past performance is no guarantee of future results.

Events have been known to trigger corrections in excess of 10% (Figure 7, left side of the distribution) with subsequent acquisition opportunities of affected assets at a discount.

Figure 6: Average S&P 500 Returns Through 30-Days After Crisis Start: 1937-2006¹



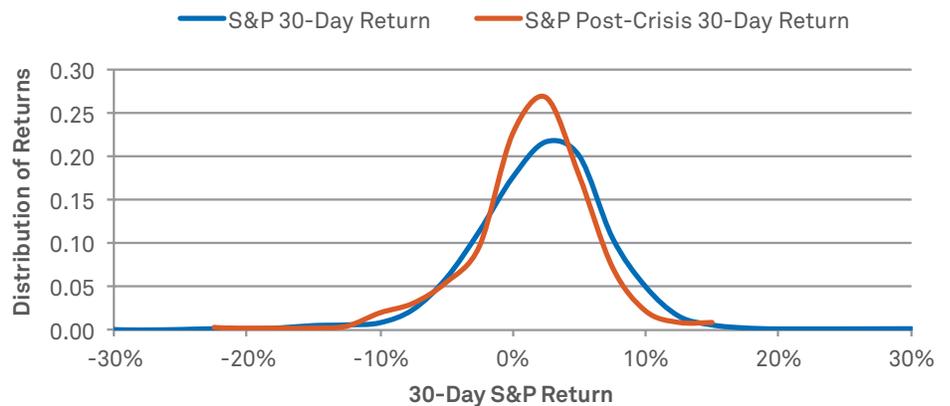
Note: Returns across crises from day prior to crisis initiation from 1-day after until 30-days after, averaged across all crises involving US (67 incidents). Crises are defined by University of Maryland’s International Crisis Behavior Project as “a breakpoint along the peace-war continuum of a state’s relations with any other international actor(s). A crisis is a situation with four necessary and sufficient conditions as these are perceived by the highest-level decision-makers of the actor concerned: 1) A change in its external or internal environment which generates 2) a threat to basic values, with a simultaneous or subsequent 3) high probability of involvement in military hostilities, and the awareness of 4) a finite time for response to the external value threat.” From Michael Brecher, *Studies in Crisis Behavior*, New Jersey: Transaction Publishers, 1978.

¹International Crisis Behavior Dataset concluded in 2006 at the time of writing.

Source: BNY Mellon using data from Bloomberg and University of Maryland. Past performance is no guarantee of future results.

In our opinion and even without impossible-to-attain perfect prescience, close attention to geopolitical risks can be a factor in improving portfolio performance and potentially mitigating overall institutional sensitivity to adverse market outcomes (Figures 6 and 7). Events have been known to trigger corrections in excess of 10% (Figure 7, left side of the distribution) with subsequent acquisition opportunities of affected assets at a discount.

Figure 7: 30-Day Normalized S&P 500 Return Distribution: 1937-2006¹



Note: Chart reflects that the S&P 500 underperforms following a crisis (455 incidents) generating abnormal tail risk (far left and far right). Crises reduce 30-day expected returns relative to normal conditions in both tails of the distribution and produce a lower mean return. Statistical tests shows that the returns are meaningfully different with a one-tail p-value=0.045 and p-value=0.090, below a statistical threshold of 0.1.

¹International Crisis Behavior Dataset concludes in 2006. See Figure 6 for additional information.

Source: BNY Mellon using data from Bloomberg and University of Maryland. Past performance is no guarantee of future results.

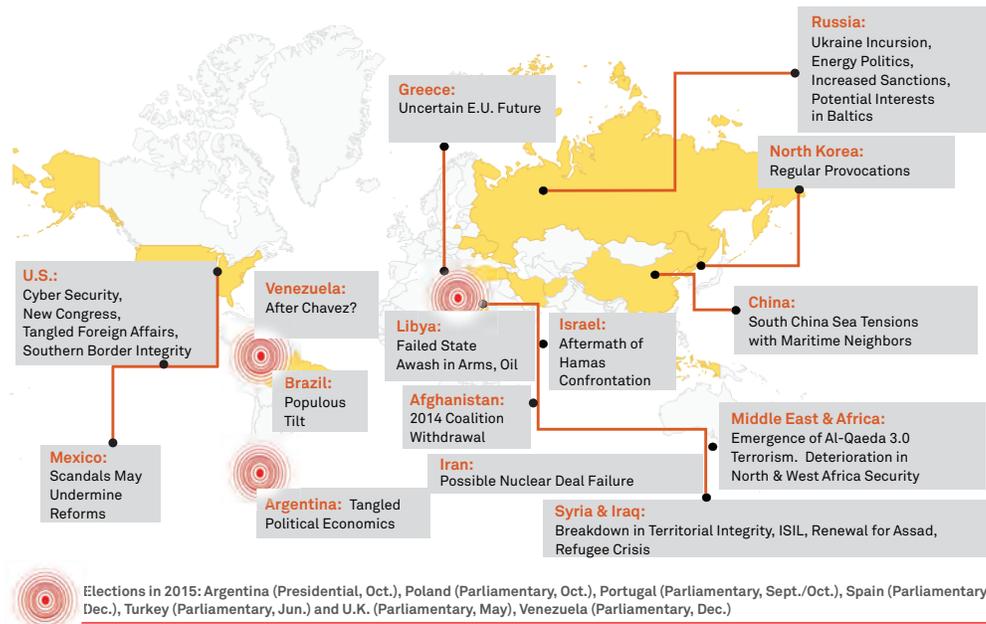
PORTFOLIO POLICY PREPARATION AND RESPONSE TO GEOPOLITICAL RISK

In our view, governments, institutions, and individuals can greatly improve their navigation of geopolitical risks by embracing the following suggestions.

1. Formalize geopolitical risk consideration: If heads of state can begin each morning with a review of important geopolitical developments, then the consideration of possible geopolitical risks should be permanently on the agenda of every weekly investment committee and risk committee. At a minimum, capital market participants should develop their own summary risk template like our accompanying map of geopolitical risk hotspots. Eschewing complacent portfolio inertia, investment committees should strive to operate on the defensive, overly-cautious side. Portfolio opportunity cost is usually less than GDP-induced downdraft damage.

Although exact events are not forecastable, key potential scenarios can be specified.

Key Geopolitical Risk Hotspots: May 2015



Source: BNY Mellon using data from Eurasia Group

2. Regular business continuity plan reviews: Approaching fourteen years after 9/11, some organizations only circulate group contacts and provide limited information on alternative worksites. Like fire drills, business continuity plans should be regularly reviewed with all employees.

3. Event Contingency/Scenario Planning: Although exact events are not forecastable, key potential scenarios can be specified. For example, the consequences of a dirty radiological bomb detonation in proximity to a major equity exchange, a terrorist attack in a public place like a transportation hub or shopping mall, a downing of a commercial airline, a prolonged disruption of the financial system, and a global pandemic (either naturally occurring or deliberately designed) should be explored in detail.

4. Monitoring: As always the case in knowledge industries like finance, the efficacy of a geopolitical risk mitigation program hinges mainly on the quality of the staff effort devoted to this crucial task. Their modus operandi should be: read; visit; analyze; and network. Despite their fine quality, cutting-edge geopolitical risk evaluators should not be content to merely read and follow the financial media. And while incrementally helpful, the additional coverage afforded by scanning the social media along with subscribing to geopolitical risk services and even rating agency sovereign analyses

will be insufficient. There is no substitute for regular visits by “boots-on-the-ground” investment decision-makers. The random man/woman interviews in the street can sometimes provide unique insight on local economic and political conditions. Geopolitical risk teams must also network into the political, economic, corporate, and investor habitat of the local market under study. Numerous think tanks serve the international community. And many local intelligence agencies willingly provide sovereign overviews upon request.

Anecdotal evidence suggests that investors who were short risky assets on 9/11/2001 reported feeling regret for profiting from the disaster.

5. Maintain portfolio diversification: Usually a good idea anyway, diversification may also help shield a portfolio from abrupt negative geopolitical developments as crises and events usually depress general market valuations. Conversely, oil, gold, bonds, and risk-haven currencies (yen, Swiss franc, US dollar) often rally as geopolitical risks elevate. Diversification offers an additional advantage as uncertainty rises. Geopolitical events often generate bifurcated market predictions as the outlook with and without a geopolitical event can vary widely. A typical mid-economic cycle prediction and associated asset allocation would call for an overweight to risky assets like equities and an underweight of fixed income as interest rates presumably rise. This perfectly reasonable stance could turn out to be completely wrong should a significant geopolitical event suddenly materialize and provoke investors to look for safe assets. The understanding of how escalated geopolitical tensions might impact current predictions for asset values is a central component to managing risk. There are no immutable rules about how investors should build in defensive diversification, or when to do so. The solution depends on particular investing strategies and goals in conjunction with an evaluation of geopolitical wildcard risks.

6. Variable reaction function by asset class/time: Like acts of nature, geopolitical shocks vary widely in intensity. Although horrific, a terrorist bombing that tragically inflicts dozens of casualties cannot be ranked in the same magnitude as the onset of a major war that affects millions. By definition, localized events have been less likely to spillover to global markets, but there can be significant moves in the relevant local asset classes. Markets often price in geopolitical events over days or weeks, following an initial reaction (Figure 8). In part, this is driven by additional information, which understandably is often scarce or even incorrect at the outset. As new information emerges, markets re-price risk and target the assets most likely to be impacted. This provides active and short-term managers opportunities on both the down- and up-swings. Long-only and long-term investors may be able to benefit from initially defensive positioning and then the opportunity to go on the offensive by acquiring temporarily undervalued assets.

7. Psychological reluctance to capitalize on GPR events: A study published in The Journal of the American Medical Association in 2002 found that some Americans, even those not directly impacted, took six months or more to cope with a national traumatic event like September 11. Anecdotal evidence suggests that investors who were short risky assets on 9/11/2001 reported feeling regret for profiting from the disaster. While many market participants try to avoid losses as geopolitical events weigh down markets, profiting is often a different matter. As well explored in behavioral finance, inertia is a powerful force that can prevent market participants from appropriately adding or shedding risk at the right time. Nonetheless, some of history’s greatest investors did just that. Nathan Mayer Rothschild, who funded the British government during the Napoleonic wars, received news about the Battle of Waterloo a day before official channels and was granted permission to trade on the information. J.P. Morgan, whose career began in the early 1860s by cleverly speculating on Union military needs during the American Civil War, also profited from buying assets cheap while helping bail out the US government during the Panics of 1893 and 1907.

Figure 8. Historical Total Returns of U.S., U.K., French, German, and Japanese Bonds and Equities During Periods of War: 1812 to April 30, 2015

Bonds	Total Return (%) 1 Year Before				Annualized Total Return (%) During				Total Return (%) 1 Year After						
	U.S.	U.K.	France	Germany	Japan	U.S.	U.K.	France	Germany	Japan	U.S.	U.K.	France	Germany	Japan
War of 1812															
Mexican American War															
Civil War															
U.S. Civil War															
French Prussian War															
Spanish American War															
Boxer War															
Russo Japanese War															
World War I															
World War II															
Korean War															
Vietnam War															
Arab Israeli War															
Yom Kippur War															
Falkland Islands															
Gulf War															
Bosnian War															
Kosovo War															
Afghan War															
Libyan Civil War															
Syrian War															
Average	4.61	6.52	3.49	6.83	4.32	5.61	9.30	3.68	5.57	7.15	6.13	6.81	1.89	6.53	2.04
Equities															
War of 1812															
Mexican American War															
Civil War															
U.S. Civil War															
French Prussian War															
Spanish American War															
Boxer War															
Russo Japanese War															
World War I															
World War II															
Korean War															
Vietnam War															
Arab Israeli War															
Yom Kippur War															
Falkland Islands															
Gulf War															
Bosnian War															
Kosovo War															
Afghan War															
Libyan Civil War															
Syrian War															
Average	8.48	4.01	2.86	9.86	-6.08	12.13	11.75	7.94	9.29	8.54	10.40	6.21	14.42	19.23	-6.52
Bond Outperformance over Equities															
War of 1812															
Mexican American War															
Civil War															
U.S. Civil War															
French Prussian War															
Spanish American War															
Boxer War															
Russo Japanese War															
World War I															
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Falkland Islands															
Gulf War															
Bosnian War															
Kosovo War															
Afghan War															
Libyan Civil War															
Syrian War															
Average	-2.08	9.36	-5.07	-6.06	-6.01	-2.27	7.31	-5.70	-12.01	-18.40	-2.50	-6.63	-30.54	25.11	-21.36
Eq. Bond Outperf.	11.09	-9.01	16.23	25.27	19.89	17.60	13.74	17.60	21.61	17.40	11.07	21.69	14.87	23.23	16.53
Eq. Equity Outperf.	17.48	9.70	7.70	21.40	6.25	12.55	17.73	15.94	43.20	15.17	11.36	21.96	15.69	23.30	13.64
Frequency of Bonds Outperforming Equities	48%	58%	38%	40%	87%	20%	27%	40%	67%	38%	33%	40%	21%	25%	70%

Includes only for Bonds, USA 10-year Government Bond Total Return Index, France 10-year Total Return Index, United Kingdom 10-year Government Bond Total Return Index, Japan 10-year Government Bond Total Return Index, Germany 10-year Government Bond Total Return Index, UK FTSE All-Share Return Index, France CAC All-Share Return Index, Japan Nikkei Total Return Index. Returns used for equities: S&P 500 Total Return Index, UK FTSE All-Share Return Index, France CAC All-Share Return Index, Germany DAX All-Share Return Index, Japan Nikkei Total Return Index. Because of data availability, we use monthly data for bonds and quarterly data for equities. For start dates of wars, end-of-month data are used. For end dates of wars, closing data for the month the war concluded. Source: BNY Mellon using data from Global Vantage Data.

STRATEGIC FRAMEWORK FOR MANAGING GEOPOLITICAL RISK IN INVESTMENT DECISION-MAKING

In order to ensure that all vectors of GPR developments are incorporated in the investment decision-making calculus, the following strategic framework hopefully will serve as a useful guide.

We believe that the first quarter of 21st century will be recalled for the containment of terrorism and political turbulence in the Middle East, resolution of East Asian tensions, and the rise of BRIC nationalism.

Five Dominant Themes

- Progression to New World Order in the 21st century
- Return of multipolar, balance-of-power world system with reduced American global footprint
- Realignment following end of Cold War and unfolding “Clash of Civilizations,” especially in theological ideology
- Globalization versus nation-state fragmentation (Quebec, Scotland, Venice, Catalonia, California, Hawaii, Texas, Alaska, Silicon Valley, Syria/Iraq)
- Proliferation and accessibility of weapons of mass destruction, cyber-strikes

Definition of Geopolitical Risk for Capital Markets

- Putting the “Political” back in front of “Economy”: It’s back to “Political Economy” and time for “Geopolitical Economics”
- Modern capital market connotation of geopolitical risk: any international event (incident, war, threat of war, disruption of major trade flow (oil), revolution, terrorist action, coup, assassination, health crisis) that adversely affects global commerce and financial markets
- Time dimension differentiation: “sudden geopolitical shocks” vs. long-term strategic evolutions

The Late 20th/Early 21st Century View of Geopolitical History

As the late US Ambassador Richard Holbrooke to the U.N. noted:

- First half of 20th century will be remembered for defeat of fascism
- Second half of 20th century will be recalled for defeat of communism

So too, we believe that:

- First quarter of 21st century will be recalled for the containment of terrorism and political turbulence in the Middle East, resolution of East Asian tensions, and rise of BRIC nationalism

A Longer View of Geopolitical History

- Technology and information have accelerated the pace of world historical change
- Geopolitical specialists grapple with defining this new era
- Fukuyama’s *The End of History* (1989)
 - History follows universal reason
 - Horizontal analyses looking at the forces operating across all regions
 - Era where Western liberal democracy is recognized as best form of government
- Huntington’s *The Clash of Civilizations and the Remaking of World Order* (1996)
 - History flows from “irrepressible conflicts and irreconcilable logics” (see latest Hamas/Israel conflict in Gaza in 2014)
 - Vertical analyses of world politics, shaped by region and culture
 - Cultural differences will persist and conflicts will continue to occur along those fault lines

*Mead’s *With God on Our Side: American Apocalypse and the Mall at the End of the World**

- Proposes a third way, an integration of the Fukuyama and Huntington theses

Yergin and Stanislaw's *The Commanding Heights* (1998)

- Proclaims political triumph of free market ideology over statist economic models in the last quarter of the 20th century
- Both free markets and statist models had a rough decade in early 21st century

INCIDENCE OF GEOPOLITICAL RISK: 1900-APRIL 30, 2015

The 1990s Were an Atypical Calm Exception; Higher GPR More Commonplace Historically

- For global capital markets, major geopolitical events occurred about once every decade and a half: World War I (1914-1918); World War II (1939-1945); Korean War (1950-1953); Bay of Pigs in Cuba (1961); Cuban Missile Crisis (1962); Vietnam War (1965-1973); Arab Oil Embargo (1973); Iranian Revolution (1979); Gulf War (1990-1991); September 11 Attack (2001); Afghanistan War (2001-2014); Gulf War II (2003-2011)
- Minor incidents have been more frequent, a sample includes: Berlin Blockade (1948); Hungarian Revolution (1956); “Suez Crisis” (1956); U-2 Incident over Russia (1960); “Cultural Revolution” in China (1965); Soviet tank invasion of Prague (1968); Pueblo incident (1968); Watergate denouement (1974); US hostages in Tehran (1979); US invasion of Grenada (1983); bombing of Marine barracks in Beirut (1983); US invasion of Panama (1989); Tiananmen Square (1989); potential Russian Coup (1991); Chinese missile testing over Taiwan (1996); India and Pakistan nuclear testing (1998); US reconnaissance plane forced landing in China (2001); revolutions in Eastern Europe (2002-2004); Trios of Hurricanes led by Katrina (2005); North Korea conducts nuclear test (2006); Bagram US Air Force base attack in Afghanistan (2007); South Ossetia incursion (2008); “Arab Spring” begins (2010); Wikileaks (2010); Syrian Civil War begins (2011); Japan Earthquake and Fukushima meltdown (2011); “Occupy Wall Street” movement (2011); Hurricane Sandy (2012); French intervention in Mali (2013); Snowden NSA leaks (2013); Egyptian coup (2013); Syrian chemical attack (2013); Ebola outbreak begins (2014); Ukraine/ Crimea (2014); extremist insurgency in Iraq (2014); potential Iranian nuclear deal (2015) (numerous terrorist attacks such as: World Trade Center Bombing (1993), Oklahoma City domestic terrorism (1995), US embassies in Nairobi and Kenya (1998), bombing of USS Cole (2000), Bali nightclub bombing (2002), Madrid train bombings (2004), London subway/bus bombing (2005), Mumbai LeT attack (2008), bombing of Marrakesh market (2011), Benghazi attack (2012), Boston Marathon attack (2013), Kenya mall (2013), Boko Haram abduction of girls in Nigeria (2014), Charlie Hebdo/Market Paris Attack (2015), and almost too numerous to count, near daily bombings in Iraq and Afghanistan)
- Expect higher frequency of geopolitical events in a more integrated world of 193 U.N. member nations

For global capital markets, major geopolitical events have occurred about once every decade and a half.

MAJOR GEOPOLITICAL RISKS: 2015-2025

Dispute Framework: “Old” Problems, “New Old” Problems, “New” Problems

“Old” Problems

- Liberal capitalism, with attendant “creative destruction” or kinder “socialist recidivism”
- Religious and ideological tolerance or “Clash of Civilizations”
- Lack of compromise among sovereigns and ideological factions
- Corruption
- Global health issues and pandemic threats
- Demographics

“New” problems include reduction in the efficacy of nation-state borders due to the enormous trade, information and social media and population flows increased by economic globalization.

“New Old” Problems

- Climate change
- Role of terrorism as a tool to engender geopolitical change
- Political and economic convergence to regional aggregates (Eurozone) or nationalist- fueled unraveling into smaller units (Balkans)
- Shift in the global balance of power
- Distributionist policies: trade, technology, information, healthcare, and wealth
- Modernization of Bretton Woods institutions: World Bank and IMF and creation of possible successors by BRICs+1
- Radical Muslims struggle to renew the Arab world through conflict with the West

“New” Problems

- Proliferation and potential use of weapons of mass destruction
- Reduced barriers to substantive terrorist operations thanks to technology
- Reduction in the efficacy of nation-state borders due to the enormous trade, information and social media, and population flows increased by economic globalization
- Cyber sabotage
- Opportunities, risks, and perceptions of genetically-modified food
- Intellectual property rights protection

REGIONAL RISKS

East Asia

- Rising influence of China; its political/economic stability; Taiwan question; territorial and resource ambitions
- Japan’s economic recovery and potential veer to nationalism
- Korean unification; North Korea activities and nuclear program
- Religious extremism, terrorism, and insurgencies
- Indonesian unbundling
- Thailand political stabilization
- Singapore’s role

South Central Asia

- India/Pakistan conflict potential
- Pakistan’s nuclear weapons and proliferation risk; violent extremism within Pakistan
- Economic liberalization vs. traditionalism
- Afghanistan’s future and stability post-2014 US withdrawal

Middle East

- Arab Spring aftermath; brewing religious conflict; a new 100 Years War
- Resolution of the Palestinian question
- Iraq: survival or fragmentation; ISIL/ISIS and risk of an extremist state (Caliphate) dominating North
- Syria: civil war
- Iran: moderation of theocracy and resolution of nuclear issue
- Future of Saudi monarchy, Egypt, Jordan, and other “moderate” Arab states: a turn toward the West or fundamentalism
- Potential power vacuum should a Middle Eastern state implode: Iran, Libya, Syria
- Turkey: stability; autocracy; West or East
- Increasing intra-regional terrorism risks
- Proliferation and risk of regional arms race

Europe

- Expansion of the EU; possibility of Greek and/or British exit from EU
- Economic integration offsetting political differences vs. rejection of capitalism and possible embrace of populist economics and right-wing politics
- Assimilation of immigrants, especially from Islamic nations
- Support current US-based order or advocate for new global order
- Russia's role: domestic social and economic stability amid resurgent nationalism and uncertainty about ultimate aims
- Separatist agitators: Basques, Ireland, Balkans, Catalonia, Venice, Scotland
- Future of NATO

Latin America

- Democracy, capitalism, populism, or authoritarianism
- Mexico: risk from transnational criminal organizations, corruption, and extent of reform
- Argentine devaluation/default redux
- Venezuela: coping with populist aftermath of Chavez, corruption, and which political model to follow
- Brazil: World Cup and Olympic spotlights, but political challenges
- Columbia: making progress with insurgency contained and economic reforms

Africa

- Mainstreaming the “lagging continent”
- HIV epidemic and Ebola outbreak
- Will the wealth, health, technology, and education divide narrow or widen
- Addressing “state failures”
- Terrorism risks in North, East, and West Africa

North America

- Will the US amend its superpower role by taking either a unilateralist or multilateralist route
- Polarization of domestic politics
- Immigration and issues along the Southern border
- Continued US activist role in fining foreign banks
- US domestic energy renaissance amid outdated infrastructure
- Vulnerability to cyber-attacks

GEOPOLITICAL RISKS CAN CONTRIBUTE DIRECTLY TO INTERNATIONAL FINANCIAL CRISES

- Between 1980 and 2000, the Council on Foreign Relations reported that at least 125 countries experienced some banking problems, with half becoming insolvent (*“Financial crises are nothing new. In the past 20 years alone, more than 125 countries have experienced at least one serious bout of banking problems. In more than half these episodes, a developing country’s entire banking system essentially became insolvent.”*¹)
- Global interconnectivity has never been higher. World exports represented 20.9% of global GDP in 1980, 18.3% in 1990, 24.1% by 2000, and 31.3% in 2013
- Global economic system racing to incorporate quickening technological changes will frequently fall on the cusp of deflationary excess supply - a natural breeding ground for political instabilities and evidenced by turmoil following recent oil price decline

Between 1980 and 2000, the Council on Foreign Relations reported that at least 125 countries experienced some banking problems, with half becoming insolvent.

1 Goldstein, Morris, Peter G. Peterson, and Carla A. Hills. Council on Foreign Relations sponsored the Independent Task Force on the Future of the International Financial Architecture. New York: Council on Foreign Relations, 1999.

Think independently,
view all risks as high,
and try to be ready for
the unexpected.

Decision-makers, perhaps guided by their subscriptions to country risk rating services, assign probabilities to the menu of geopolitical risks. In the past, most experts have made up “subjective” or “heuristic” risk probabilities for quantitatively-inclined clients. These euphemisms cannot camouflage the “back-of the envelope” nature of such “probability inventions.”

For example, we believe the probability of Korean unification looks high (75%-90%) over the next 25 years. But the when or how cannot be stated with any precision. Users should be cautious about the use of such probability inventions. The temptation to over-rely on probability estimates can engender complacencies. As often learned the hard way, the sudden emergence of low-probability events can be far more unsettling than the occurrence of a perceived high-probability event. Think independently, view all risks as high, and try to be ready for the unexpected.

MAJOR POTENTIAL GEOPOLITICAL RISKS AS OF APRIL 2015

Although comprehensive, the following current list of geopolitical risks (presented in regional rather than likelihood form) cannot cover all possibilities. In the same vein as black swan risks, some geopolitical risks are unknowable in advance. Moreover, the configuration of risks will change, sometimes rapidly, through time.

1. North Korea:

This rambunctious, de facto vassal state of China occasionally reaches outside of its self-imposed cloister to pursue international aid in exchange for another round of broken promises to behave like other nations. Questions remain following leadership transition from Kim Jung-Il to Kim Jung-Un, and a military coup remains possible. 2015, according to folklore, is supposed to be the year of the great reunification under North Korea. Three main scenarios face the “Hermit Kingdom”: reunification with South Korea; escalation of belligerence and the sale of arms, including weapons of mass destruction; and status quo. In our view, the status quo scenario seems most likely over the next decade.

2. China – Japan:

China has pursued a military buildup to reasonably reflect its rising status in the world. Japan has benefited from a strong alliance treaty with the US limiting its military to modest self-defense capabilities, but that is changing. Historical animosity and current disputes in the East China Sea raise the probability of a misstep. We believe there are three likely outcomes: status quo with flat-to-rising tensions; low-level or field-command military decision-making increases the likelihood of conflict, potentially drawing in the US; an incident leads to rapid escalation and naval conflict solely between Japan and China. While status quo is most likely given recent attempts to modestly reduce frictions, an accidental low-level military incident is an increasing risk.

3. China – Southeast Asia:

China is a critical trading partner for the nations of Southeast Asia, creating a sense of reassurance and worry simultaneously as China’s regional power increases. China claims sovereignty over the South China Sea, creating tensions with others in the region. Possible future trajectories include: China successfully uses its regional influence to secure its goals without violence; small-scale sea skirmishes increase potentially followed by economic sanctions or embargoes; diplomatic agreements pave the way for sharing resources; status quo persists as disputes remain unresolved with occasional small skirmishes. In our view, the most probable outcome is that China will achieve its goals using influence, though tensions will persist.

4. *India – Pakistan:*

These South Asian nuclear neighbors fought three full-scale wars (1947, 1965, and 1971). The Kargil War in 1999 entailed Indian military response to alleged infiltration by Pakistani troops across LOC (line of control) into Indian Kashmir. Border skirmishes are common. Kashmir remains a source of contention. Nuclear deterrence nullifies superiority of Indian armed forces and reduces the chances of an overt conflict. Possible further deterioration of internal security in Pakistan could be an issue given the country's nuclear capability. Status quo most likely outcome, but extremist ideology in Pakistan and existence of violent sub-state groups like Lashkar-e-Taiba could play the spoiler role.

5. *China – US:*

Perhaps the most-important bilateral relationship in the world. The US and China linkage is best characterized as stable, punctuated by moments of great power friction. The two countries have constructive dialogue on many issues, but tensions remain over cyber activities, Taiwan, currency, climate change (though recent deal announced November 12, 2014 has been hailed as a mutual compromise), China's naval buildup, and human rights. The friction points most likely to spark military conflict include disagreements over Japan, Taiwan, and cyber activities. Neither country is eager to confront the other, so China-Japan tension will likely remain a source of uncertainty, China will continue using economic tools to bring Taiwan into its orbit, and the real wild card is the possibility of intentional or unintentional cyber conflict.

6. *China – India:*

Border disputes continue to plague bilateral relations as Chinese and Indian military maintain large deployments to the Himalayas. Two countries likely to fuel Asian and global economic growth, but rivalry risks raise regional tensions. China and India likely to gain in influence and prestige as economies continue reforming and liberalizing, but potentially a source of increased global tensions as each seeks to recognize national, regional, and global ambitions. Both countries well-positioned to benefit from regional stability and global economic growth, but miscalculation or nationalist aims remain possible as both become increasingly important global players.

7. *India:*

India could emerge as the fastest growing economy in the world over the next 20-years. The achievement of critical mass in higher education implies the country may finally be able to bridge the chasm between labor and intellectual capital. A broad political consensus exists on economic policy. Prime Minister Modi's regime focus on "governance" should yield a growth dividend. Still low standards of living suggest the lack of an aggregate demand could remain a problem for many years. Bottlenecks and shortcomings abound in provision of public goods, not unusual in such a populous developing nation. Conditions appear ripe for a multi-year supply-side boom if reforms take hold, inflation stays in check, and India manages regional tensions carefully.

8. *Taiwan:*

The independently-governed territory is a thorn in China's side, a democratic partner to the US, and the issue that could still trigger a direct conflict between US and China in the Straits. Taiwan has a solid economy, and the population has a strong tendency to elect free-market leaders occasionally antagonistic to China mainland. China has focused on building economic ties in the hope of peacefully regaining the island in the future. We believe that the Chinese will continue along this strategy for some time to come. Other courses remain possible: Taiwan could provoke China into launching either a cyber or military strike; China could lose patience with its economic strategy and turn to other measures; the US decides to provide military assurance to Taiwan, which would aggravate China. While this is a major global fault line, our outlook is status quo for now.

India could emerge as the fastest growing economy in the world over the next 20-years.

Saudi Arabia's ruling regime leverages its natural resource base while managing internal social-cultural tension.

9. Thailand:

The perpetual coup grinds on. After experiencing a coup in 2006, political crises from 2008-2010 and 2013-2014, and another military coup in 2014, Thailand's political system remained fragile. Once viewed as a rising star in Asia, political uncertainties have dealt economic setbacks. The military junta has shown pro-business leanings, but the political instability and potential for rapid leadership transition remains a challenge. There is also an active insurgency in the south of Thailand, which is both poor and Muslim. Thailand could once again become an exciting international market, but significant political reform would be a welcome precursor.

10. Indonesia:

Largely perceived as an emerging-market success, Indonesia has experienced economic growth and political stability. Indonesia successfully countered the Jemaah Islamiyah terrorist threat, though separatist movements in the provinces of Aceh and Papua continue to present risks. Indonesia elected a new president on July 9, 2014, and reforms may lie ahead. Like many other countries, Indonesia may face renewed violence as foreign fighters return from Syria. A pattern of increased domestic violence occurred when Indonesia veterans of the Afghanistan conflict returned two decades ago. Geopolitical outlook is stable in our view, though regional troubles elsewhere in Malaysia or Thailand could upset this prediction.

11. Saudi Arabia:

Saudi Arabia's ruling regime leverages its natural resource base while managing internal social-cultural tensions. Pressure on either the economic front or the socio-cultural issues could disrupt this delicate balance. The new regime just implemented significant changes to the line of succession emphasizing importance of security. Saudi Arabia regularly confronts violent extremist threats emanating from within and outside its borders and faces a rival with growing regional ambitions in Iran. US-Iran nuclear discussions potentially aggravate Saudi Arabia's security concerns. While Saudi Arabia is likely, in our view, to sustain its current course domestically and internationally other options include: major internal threat challenges ruling regime; increased tensions with Iran over Iraq, Syria, and Yemen drive a move from proxy conflict to direct confrontation and possibly an interest in building a nuclear capability; alternatively a US-Iran nuclear deal drives Saudi Arabia towards further liberalization. Growth of extremist group Islamic State in the Levant (ISIL) in Syria/Iraq also presents risk as Saudi rulers and energy infrastructure could be regional targets. Success in Saudi Arabia likely driven by gradual reforms in economy and governance, which are underway but potentially disrupted by renewed focus on security issues. Status quo likely with increased short-term risk from ISIL and leadership transition with long-term optimism if Saudi Arabia can diversify the economy.

12. Iran:

This perennial pariah of the international system may come in from the cold. Deep disagreements persist in the US-Iran nuclear negotiations, but discussions continue after an initial framework was announced April 2015. Resolution is unlikely to shift markets drastically in one direction or another with the recent oil price decline. A nominally successful nuclear deal could gradually bring Iran (and its oil) back into the global economy. Failure would mean a likely end to current détente and possible action against nuclear facilities becomes more likely. Internal meltdown of Iran seems unlikely soon, and the new Rouhani government appears more pragmatic than the prior Ahmadinejad regime. Modest change, as charted by the new government, likely appeals to the relatively young population as more than half of Iranians are below 35 years of age according to a 2012 study. Embroiled in the Iraq, Syria, and Yemen conflicts, Iran finds

its interests with the US aligned in Iraq and opposed in Syria. Growing cyber capabilities also raise red flags, as does the extensive Iranian threat network of Quds and Hezbollah forces established to carry out attacks and facilitate financial transactions anywhere in the world. Support of allies in Iraq, Syria, and Yemen increases likelihood of larger regional confrontation; probability of successful nuclear negotiations in question as US Congress and P-5 allies feel the agreement offers too much latitude for Iran. During negotiations, Iran has temporarily halted enrichment and US provided limited sanction relief. Series of temporary agreements and continued negotiations, as opposed to grand bargain, might be the pathway forward where each side retains the modest concession.

13. Iraq:

Holding together by a thread of nationalism, but more resilient than some might have predicted. The dissolution of this artificially-contrived state into three components looks increasingly likely, but the pathway to that outcome remains uncertain. Iranian and US attempts to roll back and degrade ISIL insurgents in the North could bring back an unstable equilibrium, reducing the likelihood of exit opportunity for Kurds. Continued success of insurgents in North Iraq and Southwest Syria would make return to status quo unlikely and leave a new extremist nation controlled by the ISIL in historically ungoverned-territory. This scenario frightens almost all in the region. Global coalition coalescing to prevent such an outcome, including regional participants, but long road ahead in rolling back the threat. The odds of holding together exceed breakup, but moving towards the latter. A major terrorist attack in the West emanating from Iraq could alter this trajectory by prompting a US ground campaign.

14. Syria:

Syria's civil war remains the fulcrum of the Middle East's future in many ways. The success of insurgents in Syria directly contributed to their expansion into Northern Iraq. Foreign fighter inflows also disconcerting globally as outflows of terrorist-trained veterans present security risks. Assad regime has weathered the onslaught in part with help of stalwart allies Russia and Iran. Tide may be turning back towards Assad as search for stability trumps freedom, but the regime has suffered some recent battlefield setbacks against radical rebel factions. US and coalition airstrikes targeted extremists in Syrian territory with renewed efforts underway to support moderate opposition forces at least a year from bearing fruit. Complicated set of outcomes include: complete stabilization within existing borders; partial disintegration separating Druze, Kurdish, Sunni, and Shia parts; complete overthrow and drawn out civil conflict. Partial disintegration with civil violence in the east seems likely with spillover effects in Jordan, Lebanon, and Turkey.

15. Gaza:

Confrontations between Israel and Hamas are unfortunately regular occurrences. Challenging human rights predicament and the international community was stunned to learn that Hamas used aid, such as cement intended for infrastructure, in its military pursuits with the extensive tunnel complex. Long-term resolution remains unlikely, though both sides seem to have exhausted political will for continued violence at present. Resolution and reconstruction aid remain a long-term challenge.

16. West Bank:

Palestinian Authority (PA) retains control of West Bank and has opted for a different strategy than Hamas in Gaza. As a result, leadership in the West Bank is in a precarious position. To gain credibility in Gaza and potentially weaken Hamas, the PA must side with Hamas against Israel. While this chills Israel-PA relations, it is unlikely that large-scale violence spreads to West Bank.

Syria's civil war remains the fulcrum of the Middle East's future in many ways.

NATO ally Turkey is in an increasingly tight spot with violence to the south, refugee flows, and a weakening economy.

17. Gulf States:

The greatest geopolitical risk from these rapidly-growing major oil producers comes from inside their borders. Tensions between conservatism and modernism could exacerbate rifts that put ruling regimes in jeopardy. Countries like Oman, Bahrain, and Kuwait have already experienced civil protest. Modest changes in governments followed. The rise of mini-financial hubs also brings tensions with Western governments on regulatory issues, which could impact markets and assets. Status quo remains the likely outcome, but the possibility that one or more countries falls to more extremist populist movement should not be discounted completely.

18. Yemen:

This desert nation witnesses the collision of resource scarcity and extremist ideology. Lacking the resources of Gulf neighbors, Yemen most importantly suffers from water shortage. This is one of the arenas where resource battles might begin playing out in this early 21st century. Shiite Houthi rebellion, backed by Iran, forced resignation of President, and transition to a new ruling regime remains unclear. Saudi Arabia has conducted airstrikes and put intelligence troops on the ground as Iran has continued support for the Houthi faction. Moreover, the local al-Qaida branch (AQAP) represented the greatest threat to US homeland and allies until the recent emergence of returning Syrian foreign fighters. AQAP successfully orchestrated the most recent attack on the West in the January 2015 attack on Charlie Hebdo and marketplace in Paris. AQAP also targets Saudi Arabia. No stranger to civil war in recent history, and possibly on the brink of another, Yemen's resource issues and extremists could generate spillover effects for Saudi Arabia and Gulf States.

19. Egypt:

After years of protest, unrest, democratization, rioting, and civil strife since 2012, Egypt is calming under President Sisi. Much rebuilding of economic and social-cultural foundations lies ahead. The economy faces a series of challenges such as a decline in tourism revenue and lack of foreign investment capital, meaning destabilizing risks will persist in Egypt as the government attempts return to normalcy. The big question is whether current leadership, adopting a more centralized approach to government, will have enough time to carry out plans before the already mobilized population loses patience.

20. Libya:

This quasi-failed state is awash with warlords, militias, and weapons. Oil might be flowing, but many western energy companies sold their interests given risks and instability. Any governance and reconstruction effort has much work ahead. The fate of Libya: persist as current quasi-failed state; disintegrate further; militias agree to ceasefires and negotiation with temporary government. Status quo likely persists, but we believe real threat comes from spillover effects as arms flow across borders to Algeria, Egypt, Sudan, Tunisia, and Southern Europe.

21. Turkey:

This NATO ally is in an increasingly tight spot with violence to the south, refugee flows, and a weakening economy. The political arrangement that dominated for decades with Turkish military as defenders of secular democracy has been undone since 2002. President Erdogan, having found success with centralized control, is the first popularly elected president. Political and economic stability will face continued and new challenges. After failed EU bid, Turkey struggles with the decision to focus its future westward (Europe and US) or eastward (Middle East and China), while grappling with conflicting forces of conservatism and modernity. This collision of ideologies may deepen the polarization in the society potentially triggering anti-government protests.

Turkey now steers a delicate and dangerous policy of supporting Syrian opposition to Assad while the risks from ISIL mount. The outlook is highly uncertain given internal tensions and the dire situation enveloping in Syria to the south.

22. Nigeria:

The largest economy and most populous nation in Africa, a major oil exporter (number 5 in the world), faces significant rebellion in the north. Having pledged allegiance to ISIL in March 2015, Boko Haram, the primary insurgent player, has shown capability and willingness to attack urban and energy targets, but most activities are focused elsewhere to include the kidnapping of 300 girls in mid-2014. It is unlikely that the insurgents can either overturn the government or breakaway, but making life miserable and disrupting economic flow may be a long-term strategy for the insurgents. An important economic hub in Africa, though risks persist with opportunities.

23. Sudan:

An ongoing human rights dilemma, with ethnic violence in the western province of Darfur and an ethnic secessionist movement in the east, has constrained the natural resource-rich Sudan from participating fully in global economy. Violence has remained at a high level since 2011 following the Southern Sudanese independence referendum. Prior periods of violence in Sudan have normally ended in exhaustion, and this is likely to continue along the same lines for the foreseeable future.

24. Somalia:

This failed nation state, breeding ground for terrorism and piracy, must be coaxed into formation of a reasonable government. Somalia has already split, with the semi-autonomous territory of Somaliland governing competently in the north. The primary al-Qaida linked insurgency has successfully recruited dozens of Westerners (including US) increasing the risks of attacks abroad. Violence in Somalia has spilled over into neighboring countries Uganda and Kenya in recent years, with incursions becoming more frequent. There is little evidence that Somalia will break out of its current cycle soon.

25. Sub-Saharan Africa:

The realization of great economic promise collides with corruption, environmental, demographic, and cultural constraints. Tremendously large geographic expanse with young population and limited employment options served as a potential source of conflict going forward. About every decade, Sub-Saharan Africa is rediscovered by markets. Despite the deadly outbreak of Ebola in Western Africa, this “rediscovery phase” is in full bloom in 2015. Indeed, the long-range opportunities in this growing region of the world are vast and so are the difficulties. The dividing line between North Africa and Sub-Saharan increasingly challenged as smuggling networks, violent ideologies, people, and weapons flow back and forth. Kidnap for ransom is also a problem in parts of Northern and Sub-Saharan Africa. The old regional construct breaks down as east, west, central, and south face significantly different problems. Bright spots exist, but risks will persist.

26. Russia:

The seizure of the Ukraine’s Crimean territory rekindles memories of the 1930s. Vladimir Putin has successfully controlled government since 2000 and could constitutionally do so for another 10 years. The tremendous extractive industry-fueled growth has provided leverage over Western Europe through the energy sector in particular. Though the boom may be drawing to a close as structural headwinds face the economy. Sub-state issues like organized crime and cyber activities also create tensions. Potential future flashpoints include the Baltics, Middle East, and central Asian states. Sanctions against

In Sub-Saharan Africa, the realization of great economic promise collides with corruption, environmental, demographic and cultural constraints

The strategic continuity of the euro currency cannot yet be fully assured given disconcerting structural unemployment, especially for youth, and the rightward nationalist tilt of some European sovereigns.

Russia, of limited impact so far relative to the damage of the oil price decline, seem now to weigh on economy. Tail risk in Russia exists should sanctions really bite (targeting business operations or ownership), but seems unlikely beyond US-imposed sanctions. Despite pledges from certain EU members, European sanctions could come to an end in June without consensus support. Even modest sanctions, however, present a challenge for an economy with serious structural weaknesses. Likely outcomes: Putin recognizes long-term tensions over Ukraine unproductive and relents; Russia seeks negotiated settlements on outstanding issues without triggering crisis; continued use of violence, nationalism, and economic coercion in pursuit of state goals. We hope to be wrong, but expect more frictions with the West.

27. Ukraine:

This new tinderbox of Europe is full of contradictions. Ukraine's history since the end of the Cold War is clouded by organized crime and corruption; making NATO membership unlikely anytime soon. Russia's land grab in Crimea and Eastern Ukraine put the West in a precarious situation as the US Congress debates the merits of supplying Ukraine with defensive weapons. The possible trajectories include: status quo marked by continued fighting in eastern Ukraine with Russians on the borders; an escalation whereby Russia claims another round of intervention is necessary given humanitarian concerns or the absence of Ukrainian control; energy-starved Europe coalesces to Russian will in Ukraine; Russia-led peace negotiations to include financial compensation for giving up eastern Ukraine and Crimea. Without further Western intervention, it will be difficult for Ukraine to hold together, but we believe that Russia may hasten this outcome at any time with direct intervention in their search for justification. Ukraine also faces mounting financial problems as debt payments come due. Remains unclear if West is really willing to pay the full freight on Ukraine's obligations. The West's response has been modest, focused on sanctions and financial support thus far. We believe this will continue, as will the dispute, for some time.

28. Baltic States:

Although these nations are members of NATO, Russia may seek to restore part of its "near abroad" in former territories with ethnic Russian populations. Russia might also seek a territorial connection to Kaliningrad, the isolated territorial home of its Baltic fleet, situated between Poland and Lithuania. This would represent Russia's greatest direct challenge to the West and leave NATO with a stark set of choices. It is less likely that Russia would target the NATO allies while Ukraine remains unsettled, though not impossible if Russia believes this course offers leverage. The US has committed additional military spending to the Baltics as a warning signal and new military coalition is forming to counter Russia. While the threat to the Baltics is likely to persist rather than materialize into a reality for the medium-term, the trajectory of events in Eastern Europe suggests that unfortunately a confrontation is possible.

29. Poland:

This strategic player centrally located at the crossroads of Eastern and Western Europe is established as a Western nation, perhaps to the chagrin of those in the east. Immediately after the fall of the Soviet Union, Poland transformed the Communist Party headquarters into the stock exchange. Already a well-regarded NATO ally after meaningful contributions to the Afghanistan campaign, Poland's recent decision to condemn Russia's move into Ukraine drew sanctions against Polish fruit imports to Russia. Geopolitical risk is generally towards the positive side; but Poland could face pressure from disagreement with a rejuvenated Russia.

30. *Western Europe:*

Modern liberal democracy clashes with Islamic fundamentalism in certain nations like France and the Netherlands as evidenced by the horrific Charlie Hebdo attack. The scars of the Great Recession have persuaded certain U.K. political elements to consider a national referendum to leave the European Union. The heightened probability of Greek exit resurfaced after electoral victory of left-wing (Syriza) party in January 2015. Voters in Scotland, Venice, and Catalonia have expressed independence desires. Meanwhile, the strategic continuity of the euro currency cannot yet be fully assured given disconcerting structural unemployment, especially for youth, and the rightward nationalist tilt of some sovereigns.

31. *Hungary:*

Like others that attempted to transition towards liberal democracy and capitalism following the fall of the Soviet Union, Hungary remains in a sort of limbo. Leadership seems to prefer following a Russian course, partially rejecting liberal capitalism. Policies that include price caps and sectoral taxes are hurting the business community, and nationalization of some sectors remains a possibility. Hungary could change course and move towards liberal capitalism, but trajectory change appears unlikely soon.

32. *Latin America:*

Competing ideologies of capitalism and socialism collide with nationalism and populism. Debate over governance models and values continue as the region charts a course for the future. Major regional geopolitical fault-lines, such as Brazil-Argentina, are contained as the region focuses on domestic politics. Risks from transnational criminal organizations (TCOs) in Central America remain palpable as violence, largely tied to narcotics trade, remains high and the financial system strained. Members of former Peruvian socialist terrorist organization Sendero Luminoso, who mounted a decade-long violent insurgency, are completing their prison terms and getting released. Kidnap-for-ransom in some countries remains a concern. The likelihood of major incident in the region remains low, but corruption and violence tied to TCOs and domestic political uncertainty will likely continue to constrain economic growth and generate risk for individual countries and markets.

33. *Mexico:*

A tale of two states. On the one hand, Mexico is a thriving emerging market with sound economic fundamentals and tremendous growth opportunities, due in part to geographic proximity with the US. On the other hand, Mexico is a society plagued by narco-violence and systemic corruption, due in part to the drug flows to the US. Squaring the contradiction is challenging. While violence has dropped with the administration of President Peña Nieto, the threats remain deeply entrenched. Mexico is focused on internal growth and reforms, which are gaining steam, but criminal elements persist and may strengthen. Mexico may well be able to meet the internal challenges to security and governance over time, but the risks of resurgent violence and internal turmoil remain. The good expected to outweigh the meaningful negative tail risk.

34. *Brazil:*

A vibrant resource-rich country with a bright future, challenged by populist politics that make market-oriented reforms difficult. Brazil has experienced riots in both 2013 and 2014, triggered by policies ranging from World Cup spending to train fare. Over the long-term, we believe populist politics will continue to generate headwinds. A sharp turn to socialism, while possible, remains unlikely as the benefits of free-markets and foreign capital has proven powerful. Nuclear weapons ambitions and arms race with Argentina ended in 1991, and relations have been positive since. Status quo is most likely.

Mexico is focused on internal growth and reforms, which are gaining steam, but criminal elements persist and may strengthen.

The temptation to declare victory over al-Qaida after the death of Osama bin Laden was strong, but would have proved premature.

35. Argentina:

Plagued by ongoing issues tied to the debt default in 2002, Argentina has partially decoupled from mainstream global markets. Despite this constraint, Argentina has weathered the latest storm and brighter days probably lie ahead. Capital markets have definitely reflected that sentiment aggressively. Like others in the region, populism, socialism, and capitalism will continue to clash in the domestic political sphere and there is always the possibility of disruptive demonstrations. A debt deal and economic reforms would be a positive shock to the geopolitical outlook.

36. Colombia:

A turning point seems to have arrived after a multi-decade long struggle against insurgents and narco-traffickers. While Colombia still has work ahead, its law-and-order intelligence-led campaign has spawned positive results. Rebuilding and governance policies seem to be taking hold, potentially setting the country on a positive trajectory. Nonetheless, risks to the downside remain with a potential resurgence of FARC or narco-militias and a strand of socialist ideology that advocated violent resistance. Kidnap-for-ransom remains an issue, though declining, and that will deter some foreign investors. US aided in Columbia's turnaround and should remain a strong supporter if things turn in the wrong direction.

37. Venezuela:

The greatest sovereign risk in South America, as the exit of Hugo Chavez in 2013 has not brought the rapid policy change some expected. Chavez's 21st century socialism plan has not borne fruit and dried up much of the foreign investment that was left in the country. Plagued with a series of problems to include violent crime, retail good shortage, politicized military and police, weak government institutions, and an overreliance on the petroleum industry. Much of the geopolitical risk exists to the upside as any political action would likely be aimed at removing the current government. Despite economic weakness and systemic issues, the current government seems relatively well situated. Status quo remains likely outcome to almost everyone's detriment.

38. Cuba:

Historic changes underway as the US and Cuba seek to normalize relations. Castro regime of almost 60 years, which will pass after outliving the terms of 10 US Presidents, looks to enter a new era with US Cuba remained a destination for European and Canadian travelers and has not been entirely closed off to the world. The economy remains relatively underdeveloped and agrarian, but that could change rapidly if Cuba begins a process of liberalization and reformation. The transition would likely be slow and managed, which might be the best course after 60 years of socialist rule where the Russian military continues to exercise influence. The geopolitical risk points to the upside, but liberalization also raises the possibility of riots and populist politics. Our bet is that Cuba will be a good news story given the tourist money and investment likely to enter the country.

39. United States:

Porous southern borders and domestic political extremists could produce a series of low-level shocks. The war-weary population is increasingly hesitant to play an activist role in global affairs, though global risks and instability are increasing. Despite this predilection, US intervention to counter the ISIL in Iraq and Syria is growing more likely. Vulnerability to cyber-attacks, particularly the electric grid and financial centers, remains a significant concern. Small groups will continue to advocate for the succession of certain counties from their parent state (e.g. California) and even the succession of

Alaska and Texas from the United States. Privacy, climate change, healthcare, role of sovereignty, immigration, gun control, and other issues will continue to polarize politics. Some of these issues will creep into the capital markets, but the economic turnaround is gaining steam, which is a reason for optimism in markets.

40. Al-Qaida, Offshoots, and Associated Entities:

The temptation to declare victory over al-Qaida after the death of Osama bin Laden was strong, but would have proved premature. The violent ideology advocated and the groups that grew out of this heinous enterprise remain the stone in the global community's shoe. An attack can happen virtually anywhere at any time as shown in Paris in January 2015, and this gets the attention of highest government officials around the world. Rather than recede, the number of groups has metastasized since 2010. Al-Qaida and offshoots exist in Afghanistan, Algeria, India, Iraq, Libya, Mali, Mauritania, Pakistan, Somalia, Syria, Yemen, and Turkey. Adherents have come from over 100 countries. While the ideology and associated organizations have done well in the wake of the Arab Spring, the threat against the West has ironically receded slightly as new battle fronts open in the Middle East. Political turmoil opened up space for the organizations that operate locally, often referred to as focusing on the near enemy, and so emphasis on far enemy (US and Western Europe) is less relevant for most groups. That said, the West remains an attractive target for groups to gain bona fides, and foreign fighter flows complicate counterterrorism and homeland security. Markets have generally priced in modest terror risk, but a large attack, especially with a weapon of mass destruction (WMD) would be a game changer. Unfortunately, long-term risks of WMD attack are increasing.

41. Taliban/Afghanistan:

De facto US withdrawal from Afghanistan in 2014 was a significant event. Complete US withdrawal would likely have thrown the country back into civil war with competing factions and a strong Taliban ready to try and reassert control. The probability that the Ghani government retains at least a modicum of control outside of Kabul is heavily dependent on US funding of the Afghan military and police. The risks, of course, undermine attempts at attracting investments for Afghanistan's vast mineral deposits. Heavy mining machinery makes for an easy and attractive target. The Ghani government does have some exciting ideas for renewing Afghanistan's role as a central Asian trading center. It is unclear, after 13 years of war, whether the Taliban would be content with having the US leave or whether the Taliban want to strike back at the US. While the Taliban might prefer to focus internally, it is unlikely to control the entire country such as the border region with Pakistan (a cauldron of anti-Western sentiment) and Shia North. US withdrawal probably means increased risk from border territory.

42. Cyber-Attacks:

With an increasingly-connected global information architecture, the cyber domain represents a new source of geopolitical risk for nations, sub-state actors, and individuals. Cyber-attacks range greatly in their tactics and objectives, from a basic denial of service to large-scale theft to crashing infrastructure systems. A cyber-attack can limit access, change, or take information. The future of war will certainly have a cyber component, and anyone targeting a great power is likely to use cyber as an opening salvo. Much cyber activity, however, happens below the nation-state level to include hacktivists, organized crime, and terrorists. Cyber-attacks originating in Eastern Europe and Asia are increasingly concerning. In escalation of cyber weaponry, the offensive has a distinct advantage. Building bigger walls is not sufficient to ensure

The risks of cyber-attack highlight the “technological frontier” in geopolitics.

a secure system, while increased computing speed and improved malware make it easier to break through. Environments where offense has the advantage over defense are unstable in the security space. We see risk of cyber-attack against a critical system, or the possibility of a cyber-attack that triggers contagion and complex failure as increasing. The target, nature, and magnitude of the attack will have a big role in determining the capital market response.

The drive to explore new frontiers and access new resource pools remains strong in the early 21st century, and all of these represent potential areas of friction.

43. Geopolitics and Emergent Technologies:

The risks of cyber-attack highlight the “technological frontier” in geopolitics. Technology plays a central role in geopolitics. Social media did not cause the Arab Spring, but mobile technologies certainly contributed and probably accelerated the pace of events forcing leaders to make rapid decisions. Unmanned weapons capable of striking targets thousands of miles away have and will raise important questions about the most basic rules of international politics like sovereignty and territorial integrity. Technological shifts that alter the relative balance between offensive and defensive weapons have led to the rise and downfall of empires. Just as the 20th century was marred by two major wars brought on, in part, by technological shifts, the technological innovations of the 21st century will affect geopolitics in ways difficult to predict.

44. New Frontiers:

Space, Arctic, Sea Bed Floor: Human desire for exploration has not come to an end with Google maps. The drive to explore new frontiers and access new resource pools remains strong in the early 21st century, and all of these represent potential areas of friction. Three issues are central in space exploration today: the weaponization of space as global militaries become reliant on satellite communication systems and concordant desire to destroy such systems; growing space industry sets private sector priorities in potential conflict with a global public sector that has historically monopolized space exploration; and both public and private sectors operate with earth orbit that is increasingly full of waste potentially damaging existing capabilities. Arctic and sea bed conflicts are also important to geopolitical risk evaluation. The Arctic Council was established in 1996 as a forum for relevant parties to search for a diplomatic solution to competing regional claims, including Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the US. Russia will likely push to increase its claim, having planted a flag in the North Pole sea bed four kilometers below the ice cap in 2007. At stake in the Arctic – about one-eighth of the world’s oil and a quarter of the natural gas. Similar conflicts over sea bed resources unsettle relations in Asia. The United Nations Convention on the Law of the Sea established guidelines. But as technology improves for deep water resource extraction, new conflicts are likely to arise.

“POSSIBLE” GEOPOLITICAL EVENTS BY 2025: HIGH IMPACT AND HIGH LIKELIHOOD

We underscore and italicize “possible.” Many, some, or none of the possibilities listed below actually will happen. Other geopolitical events, not mentioned on these lists, will occur. Accordingly, the fluidity of these lists cannot be overstated. A good example: the terms, ISIL and ISIS, did not generally appear in the West until late 2013. These lists likely will look different, perhaps very different, in 2020 and 2025.

High-Impact Geopolitical Event Possibilities:

1. Conflict between US/Japan and China over territorial claim(s) or cyber activities
2. Nuclear or biological terrorist incident in West
3. Cyber activity crashes financial, electrical, transportation, and/or communications systems
4. India-Pakistan military conflict, including the threat of a nuclear exchange
5. Trade protectionism rises, with new economic alliance blocks formed
6. Saudi Arabia and Iran military confrontation over regional positioning and conflicting theological views
7. Iran gains nuclear weapons capability, touching off a Middle Eastern nuclear arms race
8. Japan ramps up military capabilities, including the ability to rapidly assemble nuclear weapons
9. Russia pursues further territorial enlargement in its “near abroad” (Baltic States, Central Asian Republics), risking conflict with Europe and the US
10. North Korea triggers war with South Korea
11. North Korea folds and unites with South Korea
12. Global health pandemic triggers mass panic and drags on global economy
13. European currency union breeds more political integration, or a breakup of the Eurozone leads to negative political and economic fallout

Some government regime changes will be constructive both for local citizens and the international community.

HIGH-LIKELIHOOD GEOPOLITICAL EVENT POSSIBILITIES:

1. Iraq-Syria borders change
2. Episodic terrorist strikes
3. China has several brief military incidents in support of its territorial claims
4. India-Pakistan relations deteriorate
5. Washington becomes more conservative/isolationist in foreign policy
6. Europe remains stuck in a low growth mode
7. The frequency and consequences of cyber-attacks escalate
8. As a result of significant economic miss-management, a populist government fails
9. Pronounced public corruption impedes the economic development of some nations
10. Additional populist attempts at nation-state unbundling into smaller units along ethnic, cultural, and language lines (e.g., Catalonia’s desired separation from Spain)
11. Who has claim to Space, the Arctic, and the seabed?
12. Never-ending debates about the appropriate role of government(s) in international and national affairs

Not all GPR developments are negative:

13. Portions of Sub-Sahara Africa makes significant economic progress
14. Some government regime changes will be constructive both for local citizens and the international community

MAJOR GEOPOLITICAL QUESTIONS FOR THE 21ST CENTURY

1. Will the European Economic Union dissipate, stay in its current form, or advance into political union as well? Will the United Kingdom exit the European Union?
2. Will nation states fragment into small pieces or consolidate into larger entities?
3. What new nation state blocs form?
4. Will Russia strive to re-create the Soviet Union, devolve into smaller states, or remain territorially unchanged?
5. Can major wars and state use of weapons of mass destruction be averted?
6. Can terrorism be sharply curtailed or will such barbaric acts become more common?
7. Will global scale problems like climate change, narcotic and human trafficking, and uneven wealth and human capital distribution be resolved?
8. In different guises than under communism and fascism, will authoritarianism again rise to threaten democratic forms of government?
9. In the almost unimaginable technologically-advanced world of 2050-2100, how will governments, corporations, institutions, and individuals adjust to the vast information flows and new economic structures?
10. Will “cyber wars” replace traditional military confrontations?

CONCLUSION

Sculpted in the aftermath of wars (e.g., the Treaty of Versailles) and occasionally democratic plebiscites, the political boundaries of the planet Earth have never been and never will be stationary. Territorial realignments based on ethnicity, culture, language, religion, economics, and possibly climate change will continue to forge adjustments to both maps and international relations. As shown in our concluding exhibit, numerous candidates may reshape the map of the world in the 21st century.

Abetted by new technologies and the continuous transition to the always elusive “New World Order,” geopolitical risks are on the rise in the early 21st century. The potential for their leakage into capital markets likely will ascend in our view. Capital market institutions would benefit from thorough coverage of geopolitical risks. Geopolitical risk evaluation accuracy will become a more important factor in differentiating asset management performance in our opinion. Unfortunately, history suggests that the distance between periodic consequential geopolitical events and adverse market reactions will not be far.

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THE GREAT TRANSFORMATION: GLOBAL MAP IS NOT CONSTANT

Countries Joining the U.N.

2002	Switzerland, Timor-Leste
2006	Montenegro
2011	South Sudan

Succession "Movements"

Nation	Succession Territory
Afghanistan	Mazar-e-Sharif
Belgium	Flanders
Canada	Quebec
China	Xinjiang and Tibet
Denmark	Greenland, Faroe Islands
Ethiopia	Eritrea
France	Corsica, New Caledonia, Basque, Brittany, Occitania, Alsace, Savoy
Finland	Aaland Islands
Holland, Germany	Frisia
Germany	Bavaria
Georgia/Russia	South Ossetia
Italy	Lombardia, Veneto, South Tyrol, Sardinia
India	Kashmir, Jharkhand, and Chhattisgarh (Naxalite)
Indonesia	Aceh
Iraq, Turkey, Syria	Kurdistan
Mali	Azawad
Moldova/Russia	Transnistria
Morocco	Western Sahara
Poland	Silesia
Papua New Guinea	Bougainville
Philippines	Mindanao
Serbia	Kosovo
Somalia	Somaliland
South Africa	Cape Town
Spain	Basque, Catalonia, Galicia, Aragon
Sudan	Darfur and South Sudan
Sri Lanka	Tamil Provinces
Thailand	Pattani
U.K.	Scotland, Wales, Cornwall, Northern Isles, and West Isles
United States	Alaska, Texas, and Puerto Rico
Yemen	South Yemen

Future Unification Candidates

North Korea and South Korea
European Union members
Romania and Moldova
North and South Cyprus

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