Political risk done right: a GeoQuant white paper

I. The fundamental reality of political risk

Brexit. President Trump. North Korea. Greater Russia. “Lavo Jato” in Brazil, “Tigers and Flies” in China. It’s almost a cliché by now to cite rising political risk as a major concern for global investors. But the fact is that political risk matters—today more than ever. From the far-reaching effects of shock elections and geopolitical instability to the daily impacts of shifting regulations and social unrest, political factors increasingly move markets and hold sway over important business decisions that impact the bottom line.

This reality is shaped by two key structural shifts in the global political economy, both of which were (ultimately) accelerated by the financial crisis of 2008-9. The first is a massive increase in capital flows – both direct and portfolio – to historically more politically-risky emerging and frontier markets. Indeed, if there is one common thread in the (still inchoate) academic literature on political risk, it is that emerging markets are generally more exposed than developed markets.1 Emerging markets have weaker political institutions, smaller capital markets and less predictable regulatory environments. Among other things, these contribute to lower FDI, higher sovereign risk premiums, greater issuance/claims of political risk insurance, and more volatile economic performance.2

To be sure, these differences between developed and emerging markets converged somewhat over time, in part because of more mature political institutions and more investible markets in EMs/Frontiers—and in part because of a clear increase in political risk in developed markets. Indeed, this is the second (and somewhat ironic) major shift driving the new reality of political risk: after the Eurocrisis, Brexit and the election of Donald Trump, developed markets no longer offer investors the political stability and policy predictability they once did. In particular, the rise of political “populism” in the US and Europe has eroded (though by no means eliminated) previous distinctions with emerging markets and brought political risk ‘closer to home’ for many investors.

In sum, rising political risk in developed markets and rising economic exposure in emerging markets are driving a substantial aggregate increase in overall country risk. Both these trends—and the resulting increase in political risk exposure for global investors—are clear in the graphs below.


Figure 1 presents global political risk exposure based on GeoQuant’s top-line Political Risk score for 74 of the largest economies, using three alternative measures of country-level economic and financial risks. For each, we multiply countries’ respective measure of economic value against their Political Risk scores and aggregate accordingly.

The first measure identifies political risk to global market capitalization. This estimate jumps significantly in 2012-13 as global equity markets bounce back from the 2008-09 financial crisis. Given the decline in IPOs and rising private equity (and similar trends taking firms off public markets), it’s probably unsurprising that this measure expands only moderately.

Exposure of real global GDP growth to political risk is rising more rapidly, in large part due to faster growth in emerging than developed markets—a trend made clear by Figure 2. Global FDI reveals a similar pattern, though at a lower level. In general, the fixedness of FDI makes it more susceptible to most political risks than more rapidly moving financial assets.

An alternative view compares these changes by financial market classification: developed, emerging or frontier. Since the financial crisis the developed economies have grown very slowly, but uncertain politics is lifting this exposure. By contrast, emerging market economies have been growing steadily, so even though political risk has not grown in aggregate, global exposure to political risk in EMs is growing.
A third useful way to view the rise of political risk is to examine our measure of demand for populist politics. We define populism as an anti-establishment political impulse reflecting unhappiness with the extant political economy, and we calculate populism as a function of the divergence between mass and elite support for the existing government, controlling for social polarization. A greater distance between mass and elite support for the government reflects higher popular demand for anti-government, and therefore anti-establishment, policy change, with higher levels of social polarization intensifying this effect. Distilled, populism reflects a demand for significant policy change that will restructure the domestic political economy and, in turn, a country’s economic relationship with the wider world.

Interestingly, we see divergent patterns in populism. Emerging markets have fallen to lower average rate of demand for populist policies as, for the most part, have frontier and exotic markets. By contrast, developed markets have experienced a substantial surge in populist demand over the past few years as is clear in the US, UK, France, Germany, possibly next year in Italy.

As such, it is not surprising that investors increasingly cite political/geopolitical risks as a top concern for their investment portfolios, whether financial or fixed. Recent surveys by McKinsey,4 the World Economic Forum,5 Price Waterhouse Coopers,6 the Association for Finance Professional/Marsh & McLennan7 and the CFA Institute8 (among others) all confirm as much. In short, recent turbulence has fundamentally awoken investors to the reality that politics moves markets.

That said, there is still serious uncertainty around how, when, and where political risk matters—especially to financial markets, where a potential adverse political event tends to influence prices probabilistically9.
The current state of US (and global) equity markets are the clearest case in point. While the dollar and Treasury markets appear to be pricing in elevated political risk since the U.S. election, equity markets are setting record highs week-over-week amid historically low volatility. Noting this discrepancy, a number of well-informed commentators\(^\text{10}\) have noted recently that, historically, geopolitical risk (rather narrowly defined; see below) has had little lasting market impact.

This combination of greater impact and greater uncertainty makes the challenge of actually defining and measuring political risk all the more pressing—and getting it right all the more valuable.

Indeed, “political risk” – both the concept and the reality – yet to be measured well, in large part because politics and political risk have traditionally been considered too idiosyncratic to define, quantify or measure systematically.\(^\text{11}\) As a result, political risk management tends toward punditry rather than rigorous analysis. While most investment and risk management activities are undertaken according to well-defined standards with established measurements and benchmarks, managing political risk (and country risk writ large) is a much more arbitrary process, lacking a clearly defined methodology. When more systematic methods are applied, political factors are (i) considered “unmeasurable” and relegated to error terms; (ii) backed out from more systematic financial and economic indicators; or (iii) proxied via narrow, ad-hoc and/or backward-looking indices (see below).

In short, existing political risk management techniques lack a systematic, fundamental approach to quantification, devolving into tautology due to the absence of a credible ontology.

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\(^{3}\) [https://www.pwc.com/gx/en/ceo-agenda/ceosurvey/2017/gx/deep-dives/2017-global-investor-survey.html](https://www.pwc.com/gx/en/ceo-agenda/ceosurvey/2017/gx/deep-dives/2017-global-investor-survey.html)
\(^{5}\) [https://www.cfainstitute.org/about/press/release/Pages/03152017_133545.aspx](https://www.cfainstitute.org/about/press/release/Pages/03152017_133545.aspx)
\(^{6}\) By contrast, fixed investments generally experience a political risk if it actually occurs or if a rising political risk coincides with a desire to exit the investment. See fn. 1.

\(^{11}\) This is driven at least in part by the Efficient Market Hypothesis (EMH), which posits that typical market transactions already reflect all, or most, economic and related information, leaving little opportunity for new information to make money. This “all-knowing market” view of the world places economic variables in ironic juxtaposition to political indicators. While economic indicators provide broadly understood explanatory power over most market decision making, politics—far more difficult to measure/quantify—is often treated as a qualitative analytical afterthought, more akin to punditry than capable of providing systematic, replicable analysis. But of course economics doesn’t explain everything and politics explains much more than nothing. GeoQuant defines and quantifies politics in order to produce actionable insight into economic risk and opportunities across countries and over time. Our range of objective, high frequency political indicators link to market and macroeconomic indicators to reveal the intuition and mechanisms that financial/economic analysis largely neglects.
II. Enter GeoQuant

GeoQuant is the world’s first high-frequency political risk intelligence firm, generating the world’s first benchmark measures of political risk. We have fused political science and computer science with the explicit goal of producing objective, high-frequency political risk benchmarks for use in investment and corporate management processes.

We begin with our proprietary, fundamental model of political risk, a uniquely deep factor model based on measuring 22 fundamentals of politics, drawn from the political science/political economy literature. We then combine these fundamentals into bottom-up, modular political risk models designed specifically for adaptation and customization by asset type, sector and/or geography. The model below summarizes our core measure of Political Risk, assessed at the country level.

Our measure for each political fundamental is a combination of two scores: a structural score and a high-frequency score.

Structural scores are derived from 250 more traditional, structured variables, drawn from a range of credible, country-level databases maintained by multilateral institutions, NGOs, governments, social scientists and the like. While all variables are drawn from currently observable data and expressed in numerical form, they still makeup a very diverse set, including both cardinal data and ordinal data, hard counts and survey inputs, etc. We use a series of aggregation and standardization techniques to combine this diverse data into meaningful indicators, and then use standard econometric techniques to weight each indicator in higher-level aggregates.
As such, structural scores provide investors with an important political risk baseline, running from 2009 to the present. However, these data adjust slowly: most of the datasets from which we draw our structural data (and country risk data more generally) are updated annually, sometimes quarterly, while other data points like election outcomes or public opinion polls are updated on an inconsistent, ad-hoc basis. As a result, shifts in these scores—like most other political/country risk indices—are generally backward-looking, with large changes reflecting already-known leaps to new risk equilibria. This is problematic as investors and risk managers must identify and position for such shifts before they occur and that doesn’t happen when data no longer reflects reality.

GeoQuant’s high-frequency scores solve this problem, updating our political risk indicators (and the structural baselines underlying them) in (near) real-time. High-frequency scores are derived from unstructured text data drawn from high-quality traditional and social media sources, generated by customized natural language and machine-learning software and integrated with structural scores using GeoQuant’s proprietary algorithm. Human analysts oversee software-generated assessments and make adjustments where needed, providing quality assurance and further enhancing our machine learning processes.

Calculated daily, GeoQuant’s high-frequency indicators provide clients with an early warning system to anticipate and track the prospects for—and direction of—change from a country’s baseline political economy. High-frequency assessments also create objective, accountable measures of political risk, providing far more meaningful comparisons across countries and over time. Finally, our high frequency indicators generate a diverse set of political measures at an equivalent frequency to financial and economic measures, greatly enhancing data validation and making GeoQuant far more actionable than traditional political risk offerings.

Data objectivity is achieved by running a well-specified social science model in which human judgement is: (i) systematized to produce continuity across analysts and over time; and (ii) helps inform a machine learning program to maximize objectivity. Moreover, the data is updated daily and additional calculations can also be performed intra-day. In comparison, standard political data is updated on an annual or, at best, monthly basis.

In sum, GeoQuant harnesses new technologies—machine learning, NLP, data science and a state-of-the-art user interface—and political science to combine structured and unstructured data into real-time, forward-looking and objective political risk data and analysis. Our fundamental, high-frequency approach allows for systematic integration into analysis and decision making, including risk management and portfolio allocation.
III. Limitations of existing offerings

Traditionally, political risk analysis is qualitative in form and more-or-less bespoke in function, with subject matter experts producing reports (both written and oral) as events and/or client requests arise. This kind of analysis can often provide consumers with valuable information and context concerning the impact of politics on investment/economic outcomes, facilitating investment decisions, due diligence and keeping clients abreast of the latest political developments.

That said, political risk analysis is by its very nature subjective, slow, and very difficult compare across geography or over time; in short, the accuracy, speed, relevance and applicability of the analysis is limited. Even when more systematic methods are employed—e.g. qualitative scenario analysis, signposting, expert surveys, etc.—they inevitably vary according to individual analysts, even within the same firm. Quality is thus inconsistent and highly dependent on skills and background of individual analysts, and it is effectively impossible to systematically validate the analysis, measure its accuracy or improve its consistency—never mind integrate into more quantitative risk management processes, expected value calculations or portfolio allocation models. Traditional analysis is also hindered by a general failure to embrace technology, including new capabilities to access and integrate more rapid and much larger information flows. This exacerbates the fore-mentioned problems of accuracy, speed, relevance and applicability.

There are also a range of political risk indices already produced by (otherwise) qualitative firms, country risk specialists, insurers, etc. However, existing political models/indices are mostly narrow in scope, in frequent in calculation, generally focused on security risks—tracking violent incidents, the evolution of conflict ‘hot spots’, the likelihood civil/international conflict—or on measuring political stability rather than political risk. This is true even for more technically sophisticated, higher frequency indicators, which tend to scrape the web for ‘scary’ words associated with uncertainty and/or conflict—a far cry from a holistic assessment of political risk.

When indicators do cover more ground, they are often a mishmash of different risk types which are measured via observation of risk outcomes rather than analyses of underlying risk drivers (i.e. they suffer from the problem of tautology vs. ontology, as referenced above). What’s more, nearly all existing measures remain mostly backward-looking and low-frequency, in large part because they are still ultimately based on analyst surveys, which are time- and labor-intensive to collate and normalize (and often highly subjective to boot). In short: these indices are good for marketing—not for measurement; they are great for integration into think pieces but not into more rigorous investment or risk management models.

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14 The dearth of credible political risk measures and methodologies is well known to those of us who work in the political/country risk industry, as well as to the markets we try our best to serve. It’s a source of mutual frustration, to be sure—neither analysts nor investors are happy with hand-waving punditry or sketchy intelligence. Still, until now these have been accepted as a sort of occupational hazard. Without anything more concrete, analysts and investors have had to rely on existing offerings as a path to at least some information in a complex and constantly-changing world.
IV. Model validations

For preliminary validation of our structural aggregates, we examined scatterplots that present averages of political risk over the past decade with averages of country-specific differences across various macroeconomic and market outcomes. These bivariate relationships are intriguing, and often reveal considerable skew to explore as we dig deeper into the data.

To begin, Figure 4 illustrates a positive relationship between poor governance (higher Governance Risk) and elevated inflation. Better run political economies experience lower inflation. This is experienced directly by consumers for whom better governance translates into lower borrowing costs (Figure 5) which is reflected as well in lower deposit rates (Figure 6). Now, lower deposit rates may not seem great for savers, but they do come with much greater predictability of inflation and, therefore, lower risk of having savings eroded away.

![Figure 4: Poor governance heightens inflation risk](image-url)
Figure 5: Governance/inflation risk directly influences lending rates...

Figure 6: and deposit rates.
One piece of evidence that countries with better governance are lower credit risks is that they can carry more debt. Figure 7 illustrates this reality, countries with lower political risk service much greater sovereign debt loads. This doesn't imply greater debt service burdens because lower risk brings lower interest rates. Indeed, the wealthiest economies have increased their debt burdens in response to the global financial crisis of the past decade even as debt service costs have fallen for many due to low borrowing costs.

![Figure 7: Better credit risks carry more debt](image1)

Figure 7: Better credit risks carry more debt

Figure 8 presents FDI stock against political risk, reflecting that lower political risk does correspond to greater levels of accumulated FDI, though the substantial skew at lower risk scores suggests opportunities for future data exploration.

![Figure 8: Lower political risk can result in higher FDI](image2)

Figure 8: Lower political risk can result in higher FDI
Figure 9 provides a much stronger relationship because it reflects how lower political risk can produce substantial differences in how an economy operates. This figure reflects the share of the population (over 15 years of age) with accounts in regulated financial institutions (FI). In well-governed economies nearly all citizens have bank accounts, but those figures decline rapidly with, no doubt, costs to the efficiency and quality of these economies.

![Figure 9: Better governed countries have well-developed consumer finance](image)

We conclude this overview with a snapshot of governance risk and GDP per capita. We may all assume that more productive, wealthier economies are better governed, but here is a data view that illustrates that relationship. Indeed, higher governance risk strongly correlates with lower wealth creation.

![Figure 10: Intuitively: better governance, better economy](image)
V. GeoQuant in action

Our machine went live in June 2016, and since then we’ve used GeoQuant to forecast most major political events in the G20 with remarkable accuracy. Some select examples:

**Turkish coup attempt**

Governance risks rose steeply before and after the coup attempt (15 July 16)

But Security has clearly been the core driver of Political Risk in Turkey: Policy risks have stayed relatively low in comparison
US presidential election

A steep rise in Social risks and a pre-election bump in Government risk presaged the Trump presidential victory.

US policy uncertainty

Our Policy instability indicator helped us predict Congress failure to repeal Obamacare in September . . . and the higher risks for a tax overhaul in December.
French presidential election

We saw the Macron wave — and a corresponding decline in Governance risk — coming well before the first round of this spring’s presidential election.
Japanese snap election

Higher risks to PM Abe’s LDP government after Tokyo municipal election loss (2 July 17) would spur snap election call by October . . .

. . . especially b/c Abe & LDP’s Institutional Support risks were rather low. An early election could stem growing risk from dropping Mass Support.
GeoQuant indicators lead currency moves

We’ve also identified a range of compelling leading indicators for G20 spot currency moves. Again, only select examples here: