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**Foresight**

# Measuring the market impact of geopolitics

September 2019



**Schroders**







An aerial photograph showing a winding road and a river flowing through a green, hilly landscape. The road curves along the edge of a body of water, which is visible in the upper left corner. The hills are covered in lush green grass, and the river meanders through the valley.

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Keith Wade, Chief Economist & Strategist, and Irene Lauro, Economist, look in detail at the behaviour of markets during periods of heightened political risk, and how investors might incorporate it as an input in their portfolios.

# Part 1: Why geopolitical risk is rising

In our recent Inescapable Truths we highlighted geopolitical risk as one of the potential disruptions investors will have to grapple with in the coming years. We argued that a heightened level of geopolitical risk, alongside other disruptive factors, would mean greater volatility in financial markets. Investor concern is apparent in surveys with geopolitical risk being regularly cited as the greatest tail risk for markets.



**Keith Wade**  
Chief Economist & Strategist

Here, we discuss the nature of geopolitical risk, its impact on the economy and markets and why we believe it is increasing.

## Geopolitical risk - impact and outlook

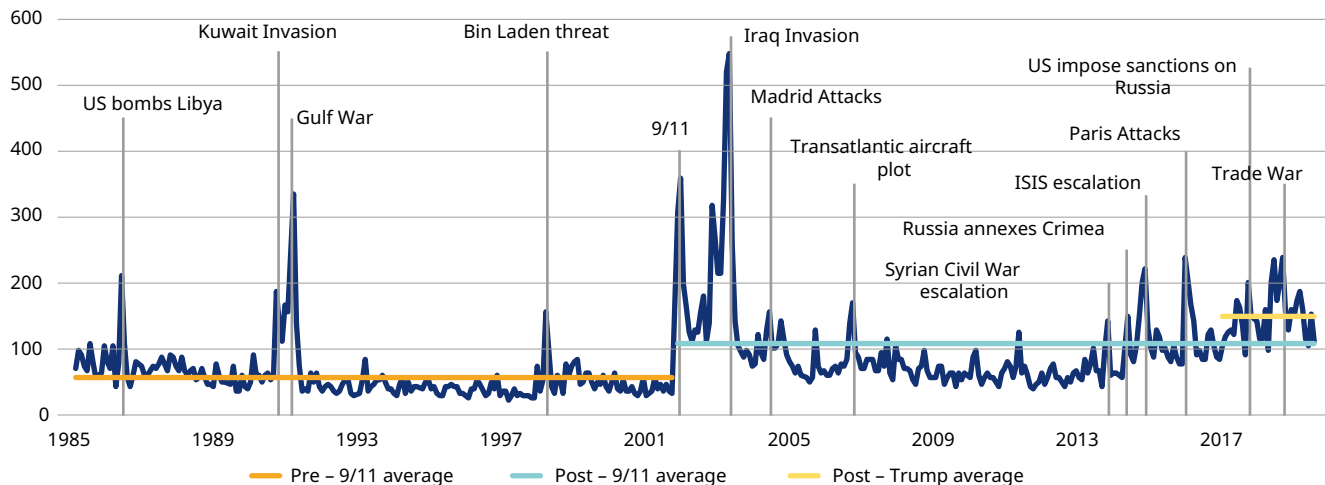
The term geopolitical risk is used to describe a wide range of issues, from military conflict to climate change and Brexit. It relates to, but is not the same as, the risk posed by populism. For our purposes we are looking at the relationships between nations at a political, economic or military level. Geopolitical risk occurs when there is a threat to the normal relationships between countries or regions. From an investor perspective we are focused on how shifts in these relationships can impact the economy and create volatility in financial markets<sup>1</sup>.

<sup>1</sup> See for example the regular Bank of America Merrill Lynch (BoAML) monthly Global Fund Manager survey.

The Geopolitical Risk index ("GPR") is probably the most widely quoted measure and reflects automated text-search results of the electronic archives of 11 national and international newspapers. The index captures the number of mentions of key words such as military tensions, wars, terrorist threats or events<sup>2</sup>. Chart 1 shows the GPR back to 1985 with the clear impact of 9/11, after which the average level of geopolitical risk doubled. There has been a notable increase in the GPR index during the Trump presidency.

<sup>2</sup> For more detail see "Measuring Geopolitical Risk" 9 November 2017 by Daniel Caldera and Matteo Iacoviello.

**Chart 1. Geopolitical Risk: step change after 9/11**



Source: "Measuring Geopolitical Risk" by Dario Caldara and Matteo Iacoviello at <https://www2.bc.edu/matteo-iacoviello/gpr.htm>. Schroders calculations and annotations, 11 April 2019

**"There has been a notable increase in the GPR index during the Trump presidency."**



### A trinity of uncertainty risks

Geopolitical risks can be seen alongside other sources of uncertainty. Mark Carney, governor of the Bank of England, has described an “uncertainty trinity” of geopolitical, economic and policy uncertainty<sup>3</sup>. Economic uncertainty refers to the risk created by the business cycle and structural factors such as the impact of new technology on growth. Policy uncertainty is concerned with the direction of interest rates, taxes and regulation as well as threats to the governance of monetary and fiscal policy such as the independence of central banks.

Here we are focused on geopolitical risk, but recognise that many events contain elements of each. For example, the current trade dispute between the US and China is a geopolitical risk as the issue threatens normal relations between the two superpowers, but it also adds to economic uncertainty and has aspects of policy risk as the two nations reappraise their trade regulations and tariff structures. The same can be said of Brexit where the UK’s proposed break from the European Union represents a geopolitical event, which then creates economic and policy uncertainty.

### Impact on economies and markets

Disentangling the impact of each is difficult, but essentially uncertainty weighs on the economy and financial markets as decision-makers hold off from making major commitments. The principal economic casualty is capital spending as without clarity on the economic environment firms delay making key investment decisions. Employment may also be hit for the same reason. Demand weakens as households delay spending on big-ticket items such as motor vehicles and housing. Meanwhile, financial investors hold off as they try to assess the impact on the economy and policy, and when the cloud of uncertainty is likely to lift.

Empirical analysis by Caldera and Iacoviello<sup>4</sup> finds that significant increases in the GPR result in weaker economic activity and lower equity market returns. Industrial production, employment and trade are all adversely affected with the effects persisting for a year after the initial shock. The advanced economies tend to be notably more affected than the emerging markets, although this may reflect the fact that the GPR index is limited to text searches in US and UK newspapers.

On the financial side, geopolitical risks have a negative impact on equity market returns in all advanced economies, whilst short-term (two-year) US Treasury yields decline. The same study also found significant effects on capital flows with higher geopolitical risk resulting in lower capital flows to emerging markets, but higher flows to advanced economies. We look at the performance of assets in more detail in part 2, but the broad conclusion is that geopolitical risk tends to trigger an increase in risk aversion and capital flows to developed markets at the expense of emerging economies.

More surprisingly, the oil price was found to weaken in response to increased geopolitical risk. This is contrary to conventional wisdom which probably reflects memories of the oil embargo of the 1970s. However, although the Middle East continues to generate headlines, it has less impact today as a greater proportion of global oil supply is controlled by non-OPEC countries such as the US and Russia. Consequently, the response of the oil price to geopolitical shocks is consistent with the downturn in economic activity.

3 Uncertainty, the economy and policy, Mark Carney 30 June 2016.

4 See Caldera and Iacoviello.

### Buy the rumour, sell the fact

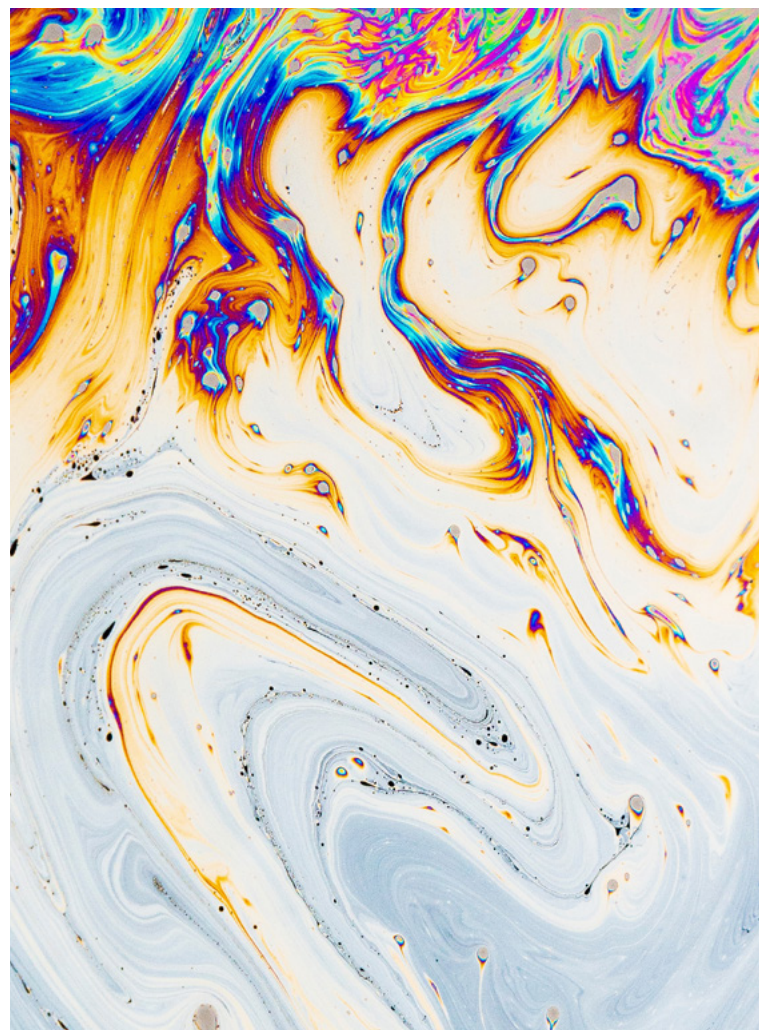
The Caldera and Iacoviello analysis finds that economic activity and financial markets were more affected by geopolitical threats than by actual events, such as the start of a war or imposition of sanctions. For the US economy, actual events produced a small, but short-lived decline in economic activity with the stock market rising one month after the shock. Meanwhile, geopolitical threats produced large and protracted recessionary effects as well as a decline in stock prices.

This finding reinforces the stock market adage to “buy the rumour, sell the fact” and probably reflects the fact that threats tend to increase risk premia as they increase uncertainty and downside tail risks. By contrast, actual geopolitical events tend to resolve uncertainty and prompt a policy response which provides protection to economies and markets. We consider this in more detail in part 2 where we look at how investors might respond.

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**“...the oil price was found to weaken in response to increased geopolitical risk.”**

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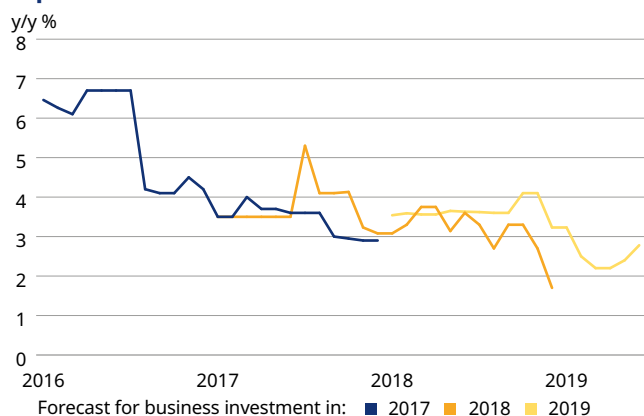
## Recent events

Looking at the world economy today, at both the macro and market level there is evidence of these effects as a result of the uncertainty created by the US-China trade dispute and by the UK's decision to leave the EU (Brexit). Ascribing outcomes to particular events is always fraught with danger given the many factors driving economic behaviour at any moment. Nonetheless, we would note that UK business capital spending growth has stalled since the EU referendum in June 2016 and has been below the expectations of forecasters prior to the referendum (Chart 2a). Consequently, growth has moved from being above to below the G7 average (Chart 2b).

UK equity market performance is complicated by the behaviour of sterling, but the FTSE 100 underperformed world equity markets after the result of the referendum and, after a sterling related recovery, has underperformed since late 2017 (see Chart 2b). The April BoAML survey found that the UK was the most unloved of any global equity market or sector with investors significantly underweight, suggesting that they are unwilling to commit capital as a result of Brexit uncertainty.

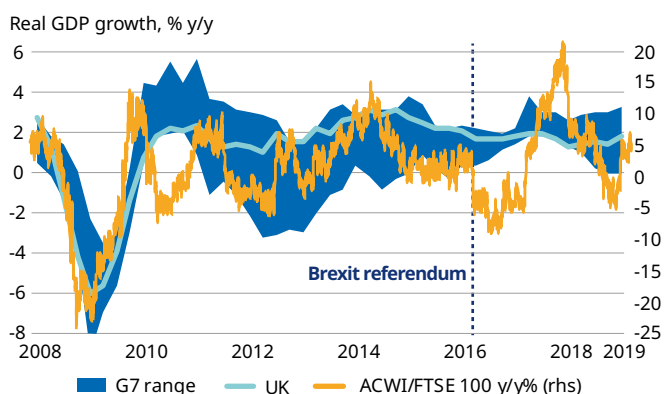
Finding similar effects in the US is more difficult as the economy has performed well during the Trump presidency in both economic and market terms, helped in large part by tax cuts and fiscal expansion. The trade wars have, however, created concern amongst US firms, many of whom have placed capital expenditure (capex) on hold.

**Chart 2a. The Brexit drag on UK capex – falling expectations**



Source: Thomson Reuters Datastream, Schroders, 10 July 2019

**Chart 2b. The relative performance of the UK economy and market**



Source: Thomson Reuters Datastream, Schroders, 10 July 2019

Meanwhile, the dollar has been firm and there is evidence that capital has flowed into the US and away from the emerging markets as tensions with China increased, as seen in previous periods of increased geopolitical risk. This has been amplified across the emerging markets on concerns over economies with supply chains which feed into US-China trade. The US equity market has outperformed and surveys show fund managers are overweight.

Overall though the contrasting experience of the US and UK bears out one of the truths about geopolitical risk: domestically-driven economies tend to be more resilient than their internationally-exposed counterparts. Even if the former are the protagonists of geopolitical risk, it is those most closely tied to the global economy who are at greatest risk.

The point is borne out when we look at the sensitivity of a range of economies to the global trade cycle. Countries like the US, India and Brazil where GDP is primarily driven by domestic factors are more resilient to the global cycle, whilst China, Germany, Japan, Singapore and South Korea are more dependent on international trade and hence more vulnerable to the disruption created by heightened geopolitical risk. There is some evidence that this is reflected in equity market performance with Germany and Japan significantly underperforming the US in many episodes of heightened geopolitical risk.

It is partly in recognition of the economic and market effects of geopolitical risk that China has embarked on the Belt and Road Initiative (BRI) as an alternative source of growth which is largely independent of the US and existing global trade. In this way the economy may become more resilient to increases in geopolitical risk.

## Dollar dominance

Arguably, the US should be more vulnerable as it runs a large current account deficit and so relies on the “kindness of strangers” (i.e. capital inflows from overseas) to maintain its spending. In the current environment, stronger growth and higher interest rates relative to the rest of the world have reinforced support for the dollar. However, even in the absence of monetary tightening by virtue of its reserve currency status the US has not struggled for funding during periods of heightened GPR. Indeed, in some ways the US could even be seen as a “beneficiary” of increased geopolitical risk through the increase in safe haven flows to the economy.

Furthermore, the importance of the dollar in the financial system has increased since the global financial crisis as European banks have pulled back from international lending and cross-border claims in dollars have risen relative to those in euros (Chart 3). This has strengthened the US in the geopolitical arena on issues such as the Iran nuclear deal where the threat of sanctions on banks which break US rules has made it difficult for the other players in the negotiations (the UK, France, Germany and China) to go against the US. The renminbi (RMB) is some way from becoming a reserve currency.

**“...domestically-driven economies tend to be more resilient than their internationally-exposed counterparts.”**



## The outlook: factors driving geopolitical risk

Although it is easy to attribute the increase in GPR to personalities such as Donald Trump, we would see the rise as part of a more general trend which is being driven by two key economic developments.

### 1. The rise of China

The first is the rise in China where national income is expected to match that of the US by the end of the next decade. From less than 5% of global GDP as recently as 1995, China is expected to account for just over 20% by 2025 (Chart 4). Meanwhile, the US share has declined from a peak of 30% to 25%. The US will still be the richer country in terms of income per head, but China will have an equivalent weight in global GDP. In this respect China will rival the US for influence and power in international politics and trade. This has significant implications for the relationship between the two countries and particularly the attitude of the US toward multi-lateral agreements and institutions.

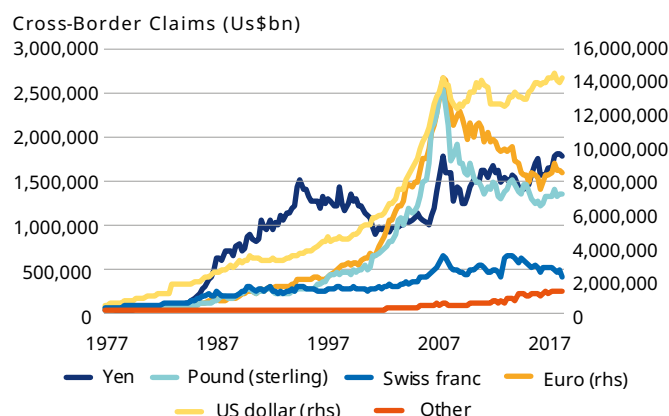
For most of the post-war era the gains from increased trade and co-operation primarily accrued to the US as the world's largest trading economy. However, now the gains from globalisation are shared more evenly, the incentive for the US to develop broader agreements is reduced. Meanwhile, the costs of leading globalisation and policing its rules through international institutions remains high. This is leading to a world where the US is no longer prepared to back those institutions; is taking a more aggressive line in its relationships with other countries; and is showing a preference for bi-lateral rather than multi-lateral agreements. As a result patterns of trade are expected to become more regionalised in coming years with hubs around the US, China and the European Union.

The rivalry between the US and China extends beyond trade and encompasses technology with both nations looking to gain an advantage in areas which will lead the next wave of growth. In the military sphere China has increased its defence spending ten-fold since 1994 and is now the second largest spender in the world. The gap remains significant with the US spending \$649 billion on defence in 2018 compared to \$250 billion in China<sup>5</sup>, but the two nations now account for half of global military spending and are the principal drivers of its growth.

The so-called 4th industrial revolution is expected to be driven by robotics and Artificial Intelligence (AI) and the winners will be those who can acquire and combine the two most successfully.

<sup>5</sup> Source: Stockholm International Peace Research Institute.

**Chart 3. Cross-border financial flows**



Source: Bank for International Settlements, 30 May 2019 (data to q4 2018)

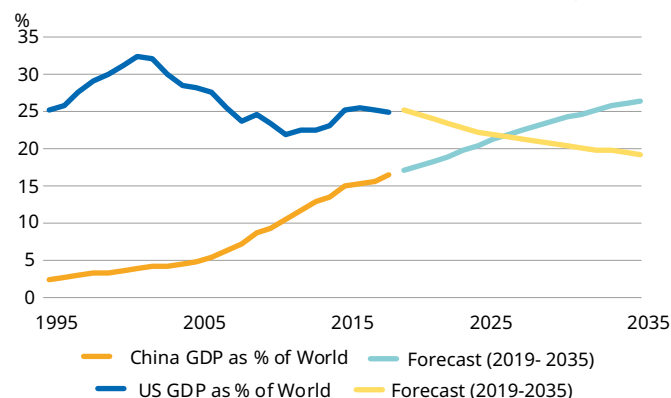


**“...patterns of trade are expected to become more regionalised in coming years with hubs around the US, China and the European Union.”**

The current dispute between the US and China is as much a “tech war” as a “trade war” with an agreement on the respect and protection of intellectual property likely to be at the heart of any eventual deal. The consequence is likely to be a regional rather than global solution and the development of twin technologies, as we are now seeing in smartphones with the recent US sanctions on Huawei.

These changes suggest more scope for geopolitical risk as the US has less of a vested interest in the global system and is more willing to risk division and break relations with other states. Strong trade links provide the incentive to maintain friendly political and military relationships so as these unravel we can expect more geopolitical conflict. This is a conclusion that will outlast President Trump.

**Chart 4. China to match US national income by 2030**

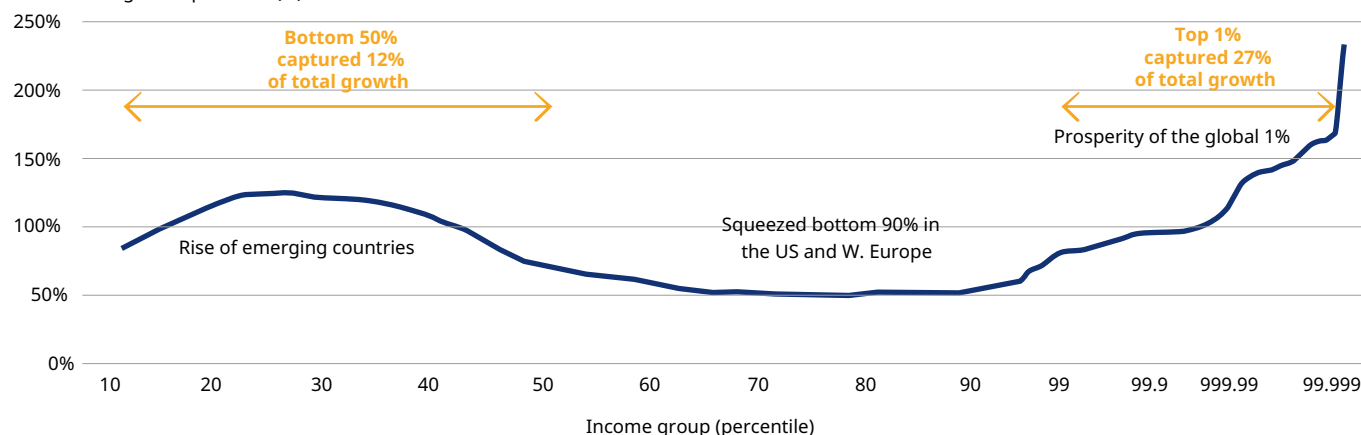


Source: Thomson Reuters Datastream, Schroders (G0039)

## Chart 5. The middle has been squeezed as real income gains have been captured by the tails

### The elephant curve of global inequality and growth, 1980-2016

Real income growth per adult (%)



Source: World inequality report 2018

## 2. The rise of populism

The second force is the rise of populism. Brexit, the election of Trump as president of the US and the coalition government in Italy are all examples of the increase in populism driven by a sense amongst voters that the economy is no longer working for them. Underlying this is the stagnation of median earnings and the increase in inequality in the major economies. On a global scale this is probably best represented by the so-called "elephant" chart which shows the change in real income since 1980 for workers across a range of emerging and developed economies. The clear "winners" have been those in the former group, reflecting the rise of China and India, whilst the "losers" have been concentrated in the middle to upper income groups found in North America and Europe.

Consequently there is a strong desire for change, or to turn the clock back, amongst the electorate. Whilst it is difficult to generalise, populists have tapped into this dissatisfaction through the theme of economic nationalism where the blame for economic malaise is pinned on globalisation, particularly increased imports, outsourcing and immigration. Hence slogans such as "America First" and "Take back control", etc.

From an economic perspective, this supports policies such as protectionism, the withdrawal from trade agreements and restrictions on immigration and cross-border investment in the pursuit of economic self interest. Clearly, these policies will increase geopolitical risk as countries renegotiate their alliances and trading relationships and become less connected and dependent on each other.

It seems unlikely that the rise in populism will reverse in the near term. Although Emmanuel Macron's victory in the 2017 presidential election in France was a boost for liberal policies, he has struggled to turn the economy around and has recently succumbed to populist pressure from the Gilets Jaunes to reverse course. Meanwhile, populist parties made further gains in the European elections in May, whilst the odds on President Trump being re-elected in 2020 are rising. These developments tend to move in long waves and it will take some time for politicians to persuade voters that they have a stake in the system.

Clearly there are significant overlaps between the two forces driving geopolitical risk. The rise of China has gone hand-in-hand with the increase in globalisation which has created winners and losers and helped feed populism. Whilst it is possible to identify other factors such as new technologies which have been equally responsible for the rise in income inequality through their effects on employment and wages, the populist narrative has become well established.

The causes of geopolitical risk today may be different from in the past but we could see a series of rolling disputes keeping geopolitical risk at elevated levels, for example as the Trump administration pursues its America First policy through trade and technology.

**"...The rise of China has gone hand-in-hand with the increase in globalisation which has created winners and losers and helped feed populism."**









# Part 2: Market behaviour and how investors should respond to rising geopolitical risk

In part 1 we discussed the nature of geopolitical risk, its impact on the economy and markets and why we believe it is increasing. In part 2 we look in more detail at the behaviour of markets during periods of heightened geopolitical risk and how investors might incorporate it as an input into their portfolios.

History has taught us that geopolitical tensions have the potential to lower stock prices while boosting returns for safe haven assets, highlighting why investors should care about geopolitics. In the past 30 years, three major conflicts, the Gulf War in 1990, the 9/11 terrorist attack and the following Iraq war in 2003, shook financial markets significantly. As shown in table 1, both the S&P 500 Index and the MSCI World Index fell sharply during these periods of heightened geopolitical risk, while safe haven assets such as the US 10-year government bond and gold witnessed substantial positive returns.

It is important to note that, in each of these historical examples, equities initially fall as markets assess risk, but within a few months they typically rise strongly. During the Gulf War, the S&P 500 started to recover five months from the beginning of the conflict. In the two subsequent events, stock markets rebounded more quickly, with both the S&P 500 and MSCI world indices recording positive returns two months after the attack on the twin towers, and after three months into the Iraq War.

**Table 1: Cumulative returns during reaction to geopolitical event (%)**

	S&P	MSCI World	Gold	US 10-year
Gulf War (Aug 1990 - Feb 1991)	-14.2	-9.6	6.4	1.9
9/11 terrorist attack (Sep - Oct 2001)	-14.9	-14.7	8.9	4.1
Iraq War (Jan - Mar 2003)	-10.2	-9.0	9.6	5.6

Source: Thomson Datastream, Schroders Economics Group. 14 May 2019.



**Keith Wade**  
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**Irene Lauro**  
Economist

## Behaviour of safe and risky assets during periods of heightened geopolitical risk

In this section we look in more detail at the interaction between geopolitical risk and market behaviour, analysing returns of different asset classes over periods of heightened geopolitical tensions. Our analysis suggests that investors should take into account geopolitical risk when making tactical allocation decisions, as investing in safe haven assets as soon as geopolitical tensions rise delivers better risk-adjusted returns.

We constructed a risky and a safe portfolio and compared their returns and Sharpe ratios in periods of elevated geopolitical risk as identified by the GPR Index (see part 1 for an explanation of the GPR index). Our safe portfolio allocates 50% of its assets to the US 10-year benchmark government bond and the rest of its weight equally distributed among gold, Swiss franc and Japanese yen. The risky portfolio is made up of 50% in the S&P 500, and the rest of its weight is allocated to the MSCI World Index (25%) and the MSCI Emerging Market (EM) equity index (25%). After 2007 we also include a basket of local EM sovereign debt made up of local sovereign bonds of Turkey, Brazil, Mexico, Russia and South Africa<sup>1</sup>.

## Risky and safe asset performance during five periods of geopolitical tension

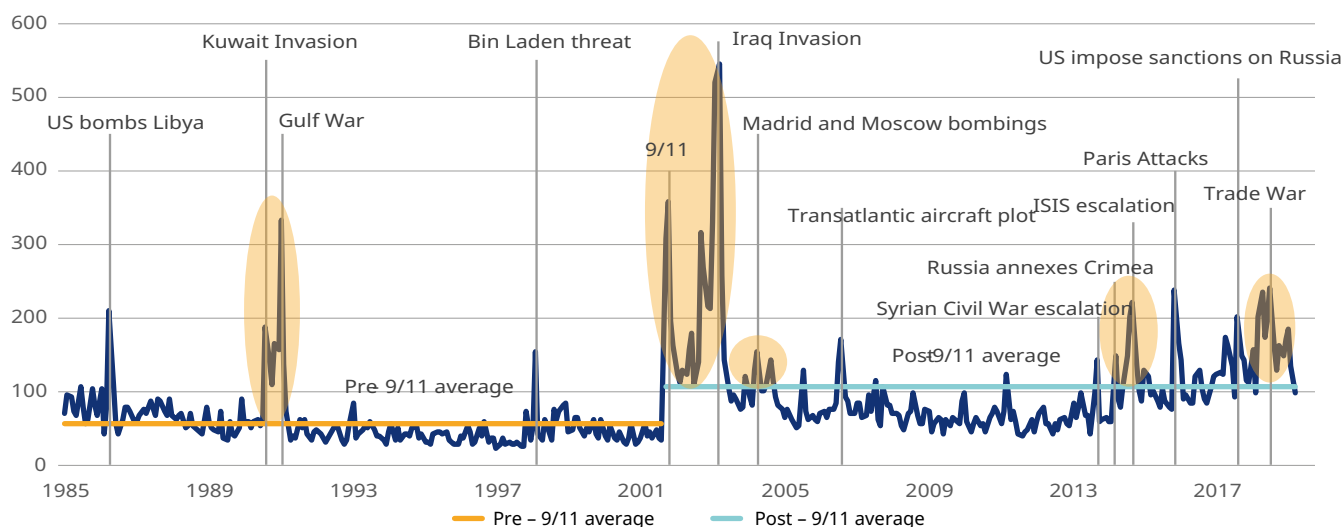
As highlighted in chart 1, we focus our attention on five different periods of heightened geopolitical risk, defined as periods in which the GPR index rises above 100 points. Data for the GPR index is available on a monthly basis starting from 1985. We do not form any judgement about timing and simply calculate the total return and Sharpe ratio of each portfolio in periods where the GPR index goes above our selected threshold (i.e. from when GPR>100 until GPR<100).

<sup>1</sup> The risky basket then becomes S&P500 (50%), with the rest of the portfolio equally divided between the MSCI World Index, the MSCI EM equity index and EM sovereign debt

**"...investing in safe haven assets as soon as geopolitical tensions rise delivers better risk-adjusted returns."**



**Chart 1: The GPR Index**



Source: "Measuring Geopolitical Risk" by Dario Caldara and Matteo Iacoviello at <https://www2.bc.edu/matteo-iacoviello/gpr.htm>. Schroders calculations and annotations, 14 May 2019

**Table 2: How our portfolios reacted to heightened geopolitical risk**

	Length	Safe portfolio		Risky portfolio		60/40	
		Return (total change)	Sharpe ratio (annualised)	Return (total change)	Sharpe ratio (annualised)	Return (total change)	Sharpe ratio (annualised)
1. Gulf War (Aug 1990 - Feb 1991)	7 months	8.2	1.0	-6.3	-1.0	-0.5	-0.9
2. 9/11 and Iraq Invasion (Sep 2001 - Jun 2003)	22 months	18.4	1.3	-16.0	-0.6	-2.2	-0.3
3. Madrid and Moscow bombings (Mar - Oct 2004)	7 months	2.0	0.4	-0.9	-0.3	0.3	-0.1
4. Crimea and ISIS (May 2014 - Feb 2015)	6 months	1.8	0.4	4.0	1.3	3.1	0.9
5. North Korea - Trump (Aug 2017 - Jan 2019)	18 months	0.7	0.4	1.6	0.3	1.2	0.3

Source: Thomson Datastream, Schroders Economics Group. 14 May 2019.

### Gulf War (1990-91)

The first significant event for financial markets was the Gulf War at the beginning of the 90s, a seven-month long war waged by coalition forces from 35 nations led by the US against Iraq. As summarised in table 2, while the risky portfolio suffered a loss of 6.3% from the beginning to the end of the war in February 1991, the portfolio made of safe-haven assets was up by more than 8%.

### 9/11 & Iraq invasion (2001-03)

Chart 1 above shows that 10 years after the end of the first Gulf War, the GPR Index spiked dramatically in 2001, due to the notable impact of the 9/11 terrorist attack, after which the average level of geopolitical risk doubled. 9/11 and the following Iraq invasion created a period of elevated geopolitical tensions that lasted for 22 months, the longest period according to the GPR Index, during which the safe portfolio recorded gains of 18%, while the risky portfolio lost 16%.

### Madrid & Moscow bombings (2004)

Terrorist attacks increased geopolitical risk in 2004, with the Moscow and Madrid bombings. The Madrid train bombings, three days before the March general elections in Spain, constituted the deadliest terrorist attack carried out in Spain and Europe since the 1988 bombing of Pan Am Flight 103 in

Scotland. Meanwhile, Moscow was shaken by four separate attacks by suicide bombers over a period of seven months. The safe portfolio delivered a better performance than the risky assets in this case as well, recording a positive return of 2% versus a loss of 0.9%.

### Crimea & ISIS (2014-15)

After a 10-year period in which the GPR Index remained mostly below its post 9/11 average, geopolitical risk increased significantly again in 2014. This was as tensions rose between Ukraine and Russia after the Russian annexation of the Crimea peninsula and ISIS military operations escalated in Iraq and Syria. Over this period, the risky portfolio delivered a higher return than the safe portfolio, and it was characterised by a better risk-adjusted performance (1.3 vs. 0.4).

### North Korea-US tensions (2017-19)

Finally, the last period of geopolitical uncertainty started in the summer of 2017, when North Korea conducted a series of missile and nuclear tests that showed the country's ability to launch ballistic missiles beyond its immediate region. Tensions between North Korea and the US eased significantly in January 2018, but geopolitical risks remained elevated amid Trump's



trade wars with China, Canada, Mexico and Europe. Over this period, despite the risky portfolio recording a gain of 1.6% compared to a smaller gain of 0.7% of the safe portfolio, risk-adjusted performance continues to suggest that investors would have been right to allocate money to the safe portfolio.

Summarising our results, empirical analysis shows that the portfolio made up of safe haven assets delivers higher risk-adjusted returns than the risky portfolio, in four out of five geopolitical risk periods we considered based on the Sharpe ratio. We also investigated whether a 60/40 portfolio (60% invested in risky assets and 40% in safe haven assets) could perform better than the safe portfolio. Interestingly, our analysis suggests that the diversified portfolio does not improve the risk-adjusted performance and that asset allocators should invest in the safe portfolio as soon as tensions start to rise and the GPR passes 100.

We also investigated if the safe portfolio continues to be the best strategy at points of extreme geopolitical risk, i.e. when the GPR index goes above 200. Here we found the results were more mixed, as the risky portfolio delivers the best performance in three out five periods we considered. Table 3 shows the return of each portfolio in the time window that starts with the GPR going above 200 to when political tensions de-escalate (GPR< 100). We would note that some of these periods are quite short; however, they highlight the point that risky assets do begin to recover before the risk index falls back to normal. These results may also indicate that risky assets have discounted a large part of the risk by the time the GPR reaches the extreme level of 200.

Table 3: Portfolio returns at points of extreme risk (time window from GPR>200 to GPR<100)

	Safe portfolio	Risky portfolio	60/40
Gulf War (Jan - Feb 1991)	1.2	7.8	5.2
9/11 and Iraq invasion (Sep - Jul 2003)	21.3	-10.4	2.3
Crimea (Aug - Dec 2014)	-3.4	1.0	-0.7
North Korea (Aug 2017 - Feb 2018)	1.4	17.1	10.9
Trump (Mar 2018 - Mar 2019)	-0.7	-4.3	-2.8

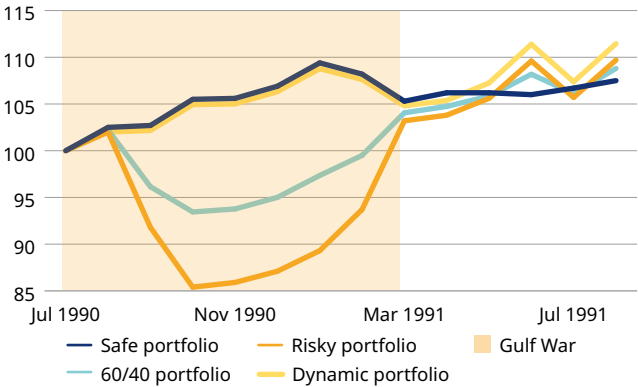
Source: Thomson Datastream, Schroders Economics Group. 14 June 2019.

Should investors ride out geopolitical risk?

Identifying shifts in geopolitical risk is difficult and, as discussed above, stock prices often recover within a few months from the end of tensions. Consequently, we ask whether investors should simply ignore the risks and remain invested in risk assets. As we have seen, this would mean greater volatility, but could leave investors better off in the long run.

For each of the five selected events we extend the time horizon of our empirical analysis to six months after the end of geopolitical tensions. This is to explore what would have happened if investors were willing to stay invested in risk assets and wait for the cloud of uncertainty to lift. We then compare this against holding a safe portfolio for the period, a 60:40 (stocks:bonds) portfolio and a dynamic portfolio where the investor starts with a safe portfolio as soon as tensions start to rise (i.e. GPR>100) and then switches back to the risky portfolio when tensions dissipate (i.e. GPR<100). In this case we take transaction costs into account as the portfolio is actively traded. We also take into account the fact that there is one-month lag in the GPR data between the latest reading and its release.

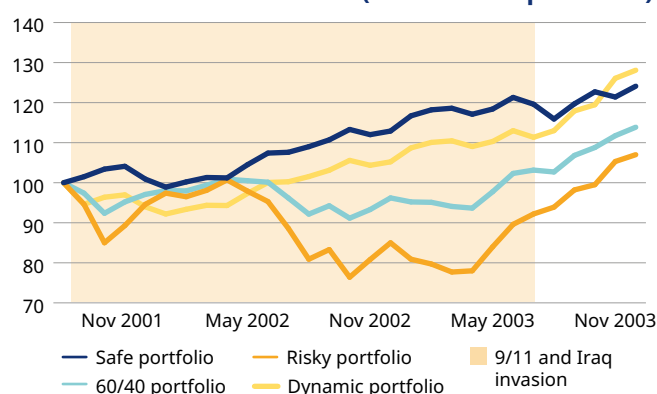
Chart 2: Cumulative returns (Gulf War)



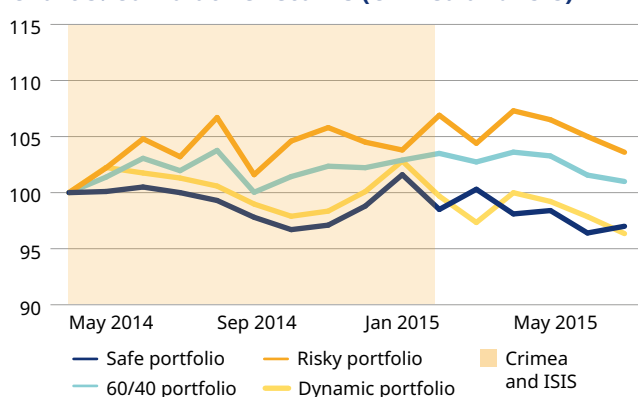
Source: Thomson Datastream, Schroders Economics Group. 8 July 2019.

“...risky assets do begin to recover before the risk index falls back to normal.”



**Chart 3: Cumulative returns (9/11 and Iraq invasion)**

Source: Thomson Datastream, Schroders Economics Group. 8 July 2019.

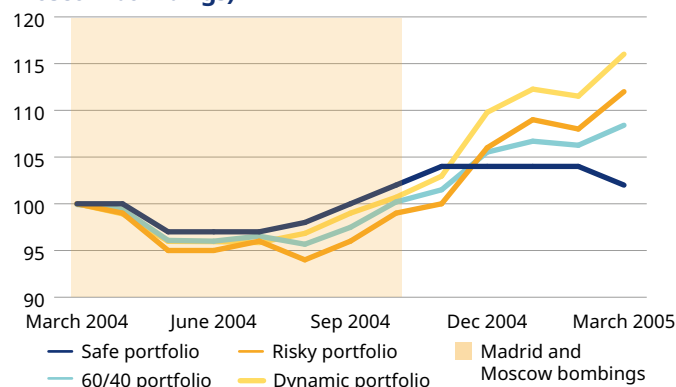
**Chart 5: Cumulative returns (Crimea and ISIS)**

Source: Thomson Datastream, Schroders Economics Group. 8 July 2019.

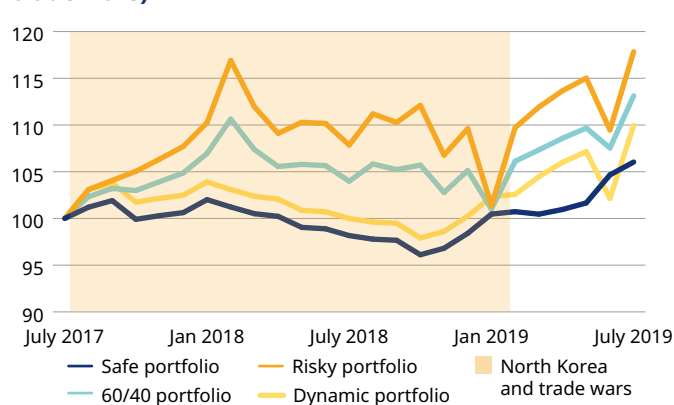
### Risky vs safe portfolios

First, when we analyse returns over the extended period of time, the safe portfolio underperforms the risky portfolio in all cases except in the 9/11 and Iraq invasion event (see Charts 2 to 6). Even though the risky portfolio started to bounce back towards the end of the Iraq invasion in Q2 2003, it was unable to make up the losses experienced during the conflict and match the safe portfolio. Overall, though, the analysis suggests that if investors are willing or able to ignore volatility, then investing in the risky portfolio represents a better strategy than a safe portfolio, as it delivers a higher return in four out of the five periods we considered. It also scores better than the safe portfolio in risk-adjusted terms in each of these four periods (Chart 7). With the exception of the 2014-15 Crimea and ISIS event, risk assets perform particularly well in the six months after the indicator falls back below 100.

It is important to highlight the fact that markets are driven by a range of factors beyond geopolitical risk. For example, as shown in charts 4-6, during bull market periods (2003-2004, 2014 and 2017) the risky portfolio delivers higher returns than the safe portfolio, even when geopolitical tensions rise. For example, the Jobs and Growth Tax Relief Reconciliation Act of 2003 (the so-called “Bush tax cuts”) and the global growth synchronisation in 2014 and 2017 provided substantial boosts to stock prices, offsetting the negative impact derived from rising geopolitical risk.

**Chart 4: Cumulative returns (Madrid and Moscow bombings)**

Source: Thomson Datastream, Schroders Economics Group. 8 July 2019.

**Chart 6: Cumulative returns (North Korea and trade wars)**

Source: Thomson Datastream, Schroders Economics Group. 8 July 2019.

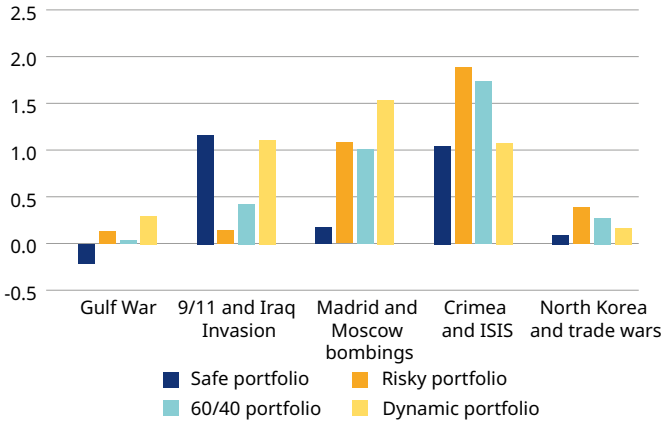
We found that there were gains to be made from taking a more active approach. The dynamic portfolio where investors switch on the signal from the GPR delivers a higher return than the risky portfolio in three out of the five events and performs better than the safe portfolio in four out of the five periods. Moreover, as shown in chart 7, these findings are in line with the results of the analysis of risk-adjusted returns. The dynamic portfolio provides higher Sharpe ratios than the risky portfolio in three out of the five periods we considered and higher than the safe portfolio in four out the five periods.

**“...the analysis suggests that if investors are willing or able to ignore volatility, then investing in the risky portfolio represents a better strategy than a safe portfolio...”**





Chart 7: Sharpe ratios\*



Source: Thomson Datastream, Schrodgers Economics Group. 8 July 2019.

\*Sharpe ratios are calculated in the time window that starts with the GPR going above 100 to six months after the end of each of these geopolitical events

### Can investors ignore geopolitics?

Our analysis shows that geopolitical risks can have a significant but temporary impact on asset returns, lowering stock prices while supporting safe haven assets. The first part of this empirical study shows that a safe portfolio delivers the best risk-adjusted returns during periods of heightened geopolitical risk. In the second part of the study, where we extend the time window of our analysis to six months after the period of heightened geopolitical risk, the results suggest that in absolute terms a risky portfolio delivers a return higher than a safe portfolio in four of the five examples shown above. This would suggest that given a choice between a safe or risky portfolio, investors should favour the latter and ride out geopolitical events.

Taking a step further though, we find that a dynamic portfolio, which holds safe haven assets when tensions become elevated, and switches to risky assets when they dissipate, delivers a higher total return than a risky portfolio in three out of the five periods we considered and in four out of five when compared to a safe portfolio.

**“...geopolitical risks can have a significant but temporary impact on asset returns, lowering stock prices while supporting safe haven assets.”**

Table 4: Sharpe ratios\*

	Safe portfolio	Risky portfolio	60/40 portfolio	Dynamic portfolio
Gulf War	-0.21	0.13	0.04	0.30
9/11 and Iraq Invasion	1.17	0.14	0.43	1.12
Madrid and Moscow bombings	0.18	1.08	1.01	1.55
Crimea and ISIS	1.05	1.89	1.74	1.09
North Korea and trade wars	0.10	0.39	0.28	0.18

If investors are not willing to ignore volatility, chart 7 and table 4 suggest that the results of the risk-adjusted returns analysis are not different from what we have found when analysing returns in absolute terms. In particular, among the five periods we considered, a dynamic portfolio improves the average Sharpe ratio by 15 basis points when compared to a risky portfolio and a diversified portfolio, and by 40 basis points when compared to a safe portfolio.

We recognise that this analysis is based on a relatively small sample size of five periods which are unlikely to repeat in exactly the same way. Nonetheless, we find that investors should not ignore geopolitical risk as there are benefits to portfolio performance from switching to safe haven assets when the GPR becomes elevated. We do not advocate adopting the mechanistic approach we have adopted for the analysis, but the work we have done bears out the conclusion that geopolitical risk is important and can be of benefit in active asset allocation. Note that this applies even though we have not tried to optimise the level at which to make the switch or tried to predict movements in the GPR.

Although there has been a significant increase in the GPR during the Trump presidency, as highlighted in Part 1, the emergence of China as a global superpower and the rise of populism means this is unlikely to change soon. Despite the agreement between the US and China to resume trade talks at the recent G20 meeting, tensions between the two nations remain high and the GPR index remains elevated. It is also the case that the scope for central banks to ease policy and provide relief to risk assets as an offset to heightened political risk is less than in previous episodes, given the low level of interest rates and size of central bank balance sheets. Consequently, taking geopolitical risk into account when choosing portfolio strategy will be increasingly important for investors.

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