





Annual Dinner 2023

Featuring: Marko Papic





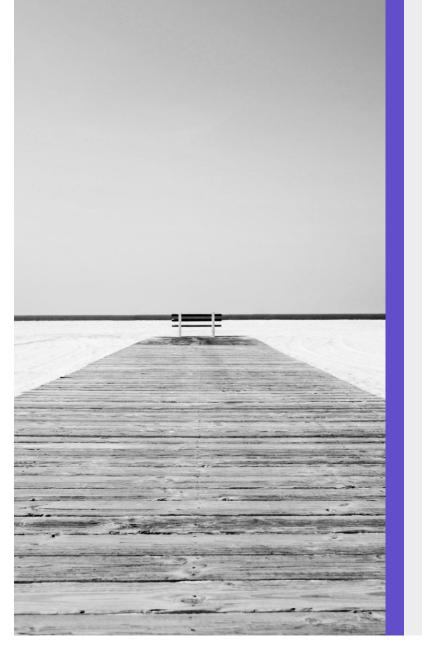








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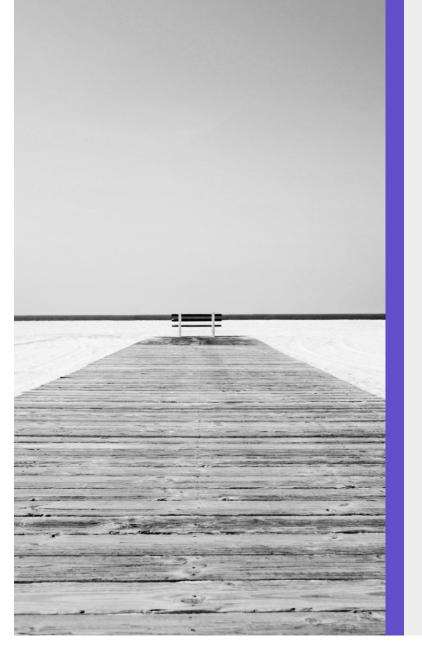


High Level Summary

- Framework: Investors have to understand that geopolitics is not a risk. It is a framework for investing, like valuations or momentum. As such, it can sometimes offer a signal to sell, or a signal to buy. Russia's invasion of Ukraine is a great example of how a constraint-based framework can be useful... even when it is wrong!
- Is Taiwan a Risk? Our constraint-based framework posits that Beijing is unlikely to invade Taiwan this decade. It is not militarily ready and its economy is more addicted to the West, not less, than ten years ago.
- Multipolarity Is Critical for Investors: China-US conflict is embedded in a multipolar global context, which will continue to shape and define the limits of what both the US and China can do. Most importantly, multipolarity will ensure that the world does not bifurcate neatly into two camps, a Western and Chinese. This will limit the inflationary impulses that would wash over the world in a complete de-globalization scenario. At the same time, a multipolar world will incentivize the rebuilding of supply chains and other assorted capex projects that will be inflationary. The end result may actually be a Goldilocks outcome of just enough inflation. In addition, multipolarity will incentivize technological progress and rise in productivity.
- Three Risks: Most investors are overly focused on US-China tensions and the war in Ukraine. Three risks that are not paid enough attention are the situation in the Middle East, threats to the supply of commodities, and the ongoing high levels of political polarization in the US.



Geopolitics Is Not a Risk, It Is a Framework



The Constraint Framework

Policymaker preferences are optional and subject to constraints, whereas material constraints are neither optional nor subject to preferences.

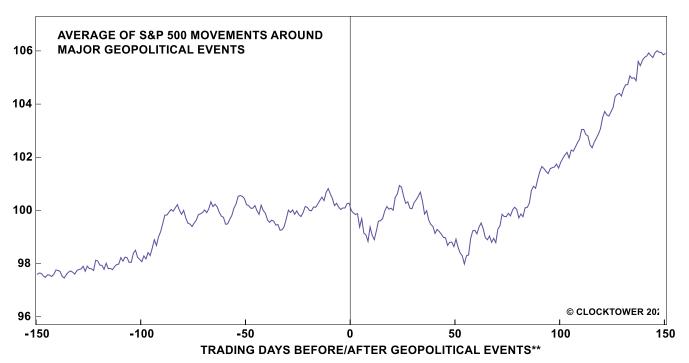
- Alpha: Geopolitical alpha is harvested when markets overstate or understate geopolitical risks and opportunities.
- Beta: Geopolitical beta is about catching phase shifts and long-term trends.



Framework | Most Important Lesson: Geopolitics Is Not a Risk

Geopolitics is neither a risk nor an opportunity. It is a "knowledge realm," a "tool," and a "factor." Simple extrapolation rarely works in practice. First order effects are often wrong.

I Am Not Here to Tell You to Buy Defense Stocks!!!!!



^{*} REBASED TO FIRST DAY OF GEOPOLITICAL EVENT = 100.

^{**} INCLUDES 26 MAJOR GEOPOLITICAL EVENTS FROM THE CUBAN MISSILE CRISIS IN 1962**510-THE RUSE** WAR IN 2022. SOURCE: MACROBOND.



Is Russia Going to Invade Ukraine?

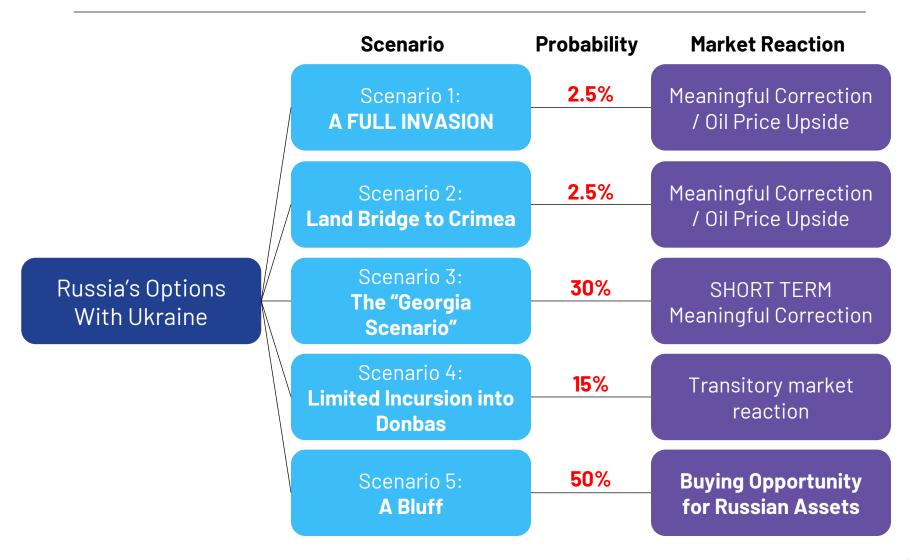


Case Study: Russian Invasion of Ukraine

- 1. Demographics: Russian-speaking Ukrainians tend to be urban, educated, elites. Furthermore, they are not necessarily pro-Moscow. The insurgency against Russian military will be serious.
- 2. Politics: By annexing Crimea and supporting rebellion in Donetsk and Luhansk, Moscow has hived off the most pro-Russian parts of Ukraine, leaving an all-together far more politically homogenous whole. This was a **strategic mistake** by Moscow.
- **3. Geography**: Ukraine is the *largest country of Europe*, comparable in size to Germany and the UK combined. It has a population of ~44 million, with another ~2 million Ukrainians living in Russia.
- 4. Military: Russian military is quantitatively strong, but it has not conducted a large, land-based, war since Afghanistan in the 1980s. Its incursion into Syria was limited, Georgia had no army, and Chechen conflicts in the 1990s are not comparable.
- 5. Response from the West: The economic sanctions, SWIFT exclusion, and support of insurgents in Ukraine will sap Russia immensely.

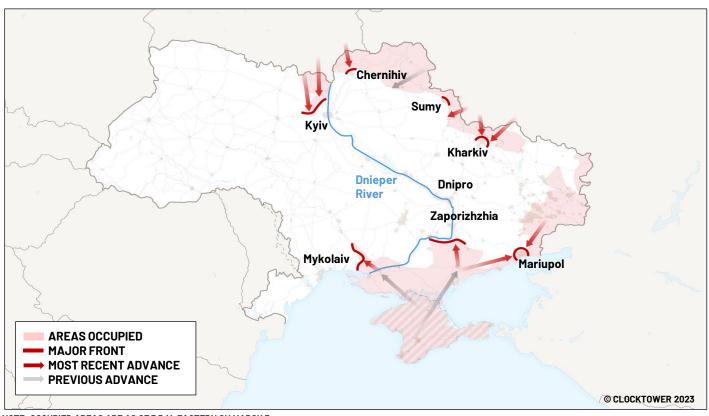


Constraints | Scenario Probabilities





Constraints | Russian Military Invasion Made No Sense



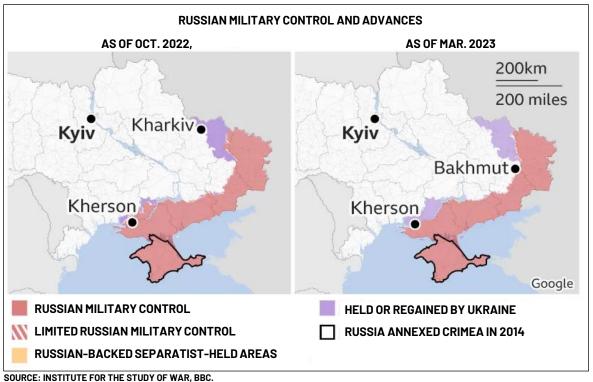
NOTE: OCCUPIED AREAS ARE AS OF 3 P.M. EASTERN ON MARCH 3.
SOURCE: INSTITUTE FOR THE STUDY OF WAR WITH AMERICAN ENTERPRISE INSTITUTE'S CRITICAL THREATS PROJECT.



Constraints The Constraints Are Material

Russian intervention in Ukraine will go down in history as one of the most botched military operations ever. Constraints have overcome preferences (of both combatants!).

Russia Is Stuck in Ukraine - Current Line of Control Is Likely Long-Term Ceasefire Line



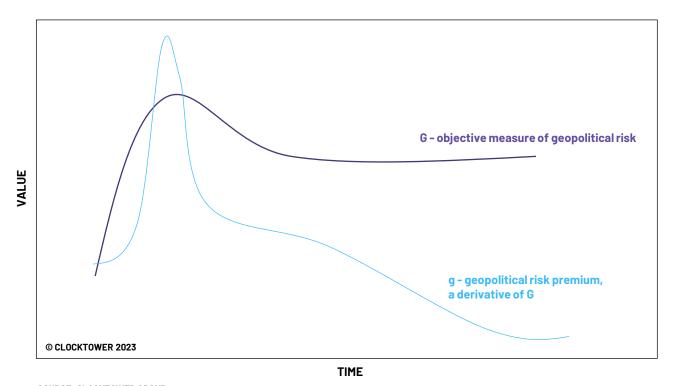
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Constraints | The Market Sniffed out the Constraints...

If the war becomes settled in a back-and-forth around a line of control, it is unlikely to matter anymore for the market. Geopolitical risk premium requires objective risk to continue to appreciate.

Geopolitical Risk Premium Does Not Correlate With the Objective Measure of Geopolitical Risk

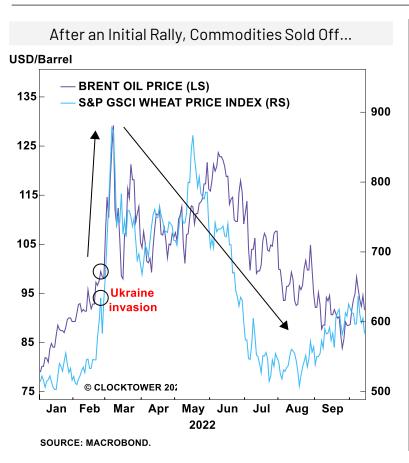


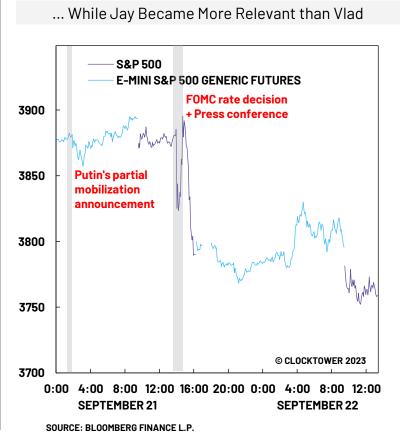
SOURCE: CLOCKTOWER GROUP.



Constraints | Eventually, Fundamentals Matter

For geopolitics to matter, it needs to impact fundamentals and material constraints. Even the Ukraine War stopped mattering to the markets. Commodities and bonds sold off in the face of supposed risk.

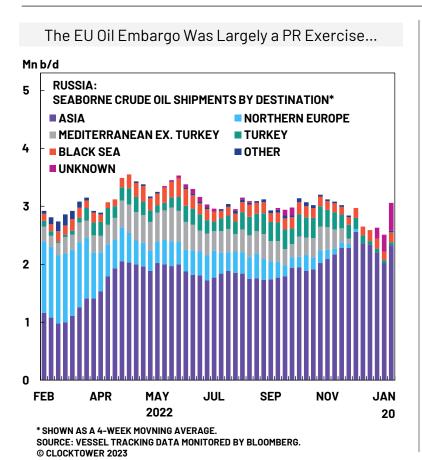


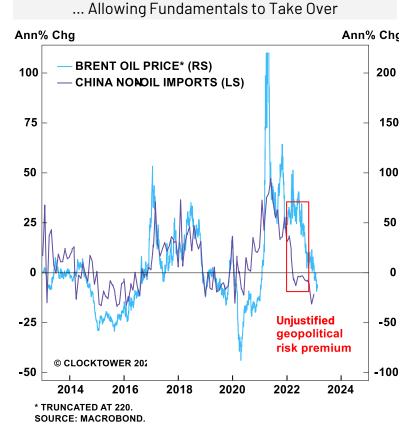




Constraints | By June, Oil Prices Became the Alpha

By the summer, three things became evident. First, war in Ukraine was in a stasis. Second, Russian oil exports were unaffected by the embargo. Third, Chinese demand was weak. Short oil was *the* call.







Summary

The constraint-based net assessment underestimated the probability of Russian invasion into Ukraine. However, its tenets held true even if Russian policymakers ignored them. Putin's preferences broke on the rock of material constraints.

By sticking with the constraints, investors were able to generate alpha by:

- Shorting commodities (ex-oil) from May onwards;
- Shorting oil from June onwards;
- Going long risk assets once it became clear that CPI peaked (which was helped by oil peaking).

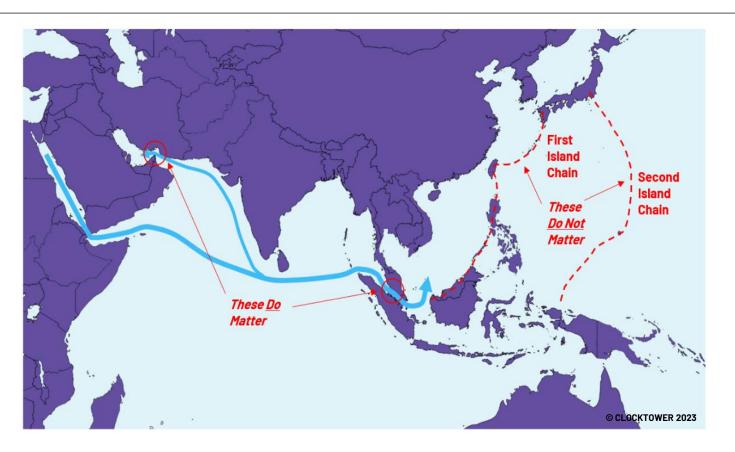


Is China Going to Invade Taiwan?



Peak China | China's Trap #1: Geography

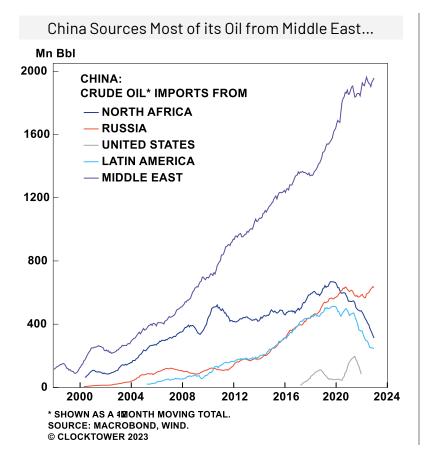
Many geopolitical strategists talk of First & Second Island Chains... this is all nonsense. China's geographic fulcrum is half the planet away: The Strait of Hormuz.

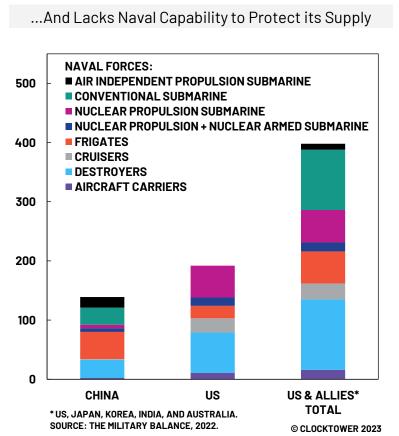




Peak China | China Will Struggle to Project Power

From the US perspective, the Middle East is really China's problem. It is Beijing that sources most of its oil from the region. **So, if chaos ensued, it would be China's problem primarily**.



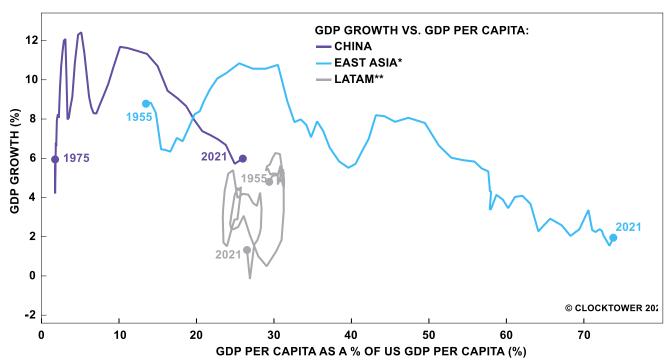




Peak China | China's Trap #2: The Middle-Income Trap

China's productivity growth is declining, a dire outcome that will result in the country potentially being trapped in the middle income. China needs to avoid the middle-income trap.

China Is Too Poor to Get Stuck in the Middle-Income Trap



^{*} AVERAGE OF JAPAN, SOUTH KOREA, AND TAIWAN.

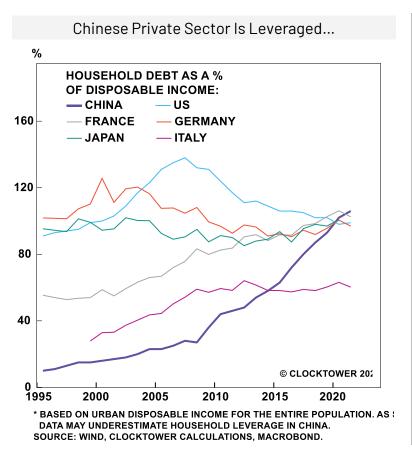
SOURCE: CONFERENCE BOARD TOTAL ECONOMY DATABASE, BCA RESEARCH, MACROBOND.

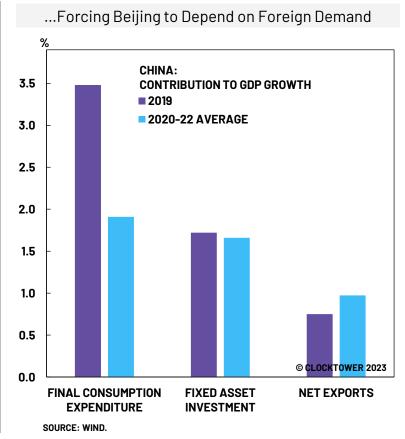
^{**} AVERAGE OF ARGENTINA, BRAZIL, CHILE, COLOMBIA, ECUADOR, GUATEMALA, MEXICAD, AND PER NOTE: ALL SERIES SHOWN AS-XIBAR MOVING AVERAGE.



Peak China | Exports Are the Only Thing that "Works"

The private sector is at the end of its debt supercycle and policymakers are pushing on a string. The only source of growth for China are exports, which means the economy is leveraged to foreign demand.

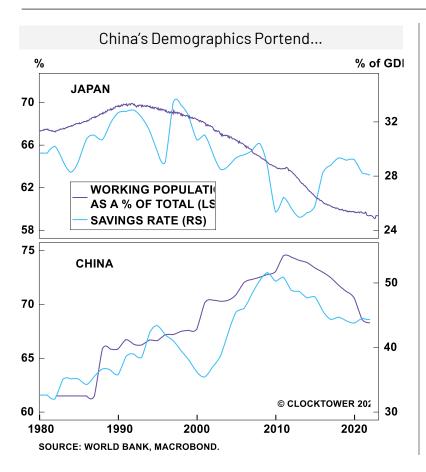


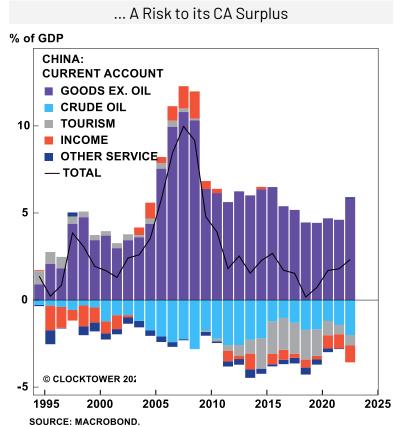




Peak China | Trap #3: Demographics Are A Risk to the BoP

If Y = C + I + G + NX, and S = Y - (G + C), then S - I = NX = CA. Math story put simple: China's demographics will guarantee to tip the country into a CA deficit.

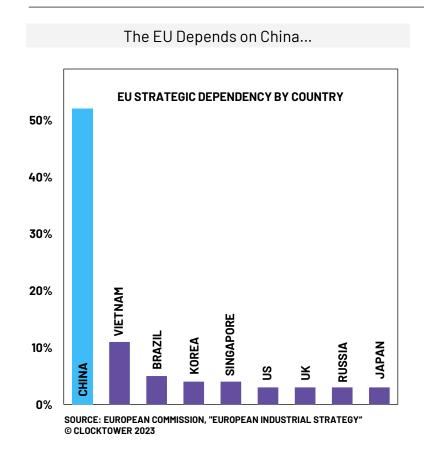


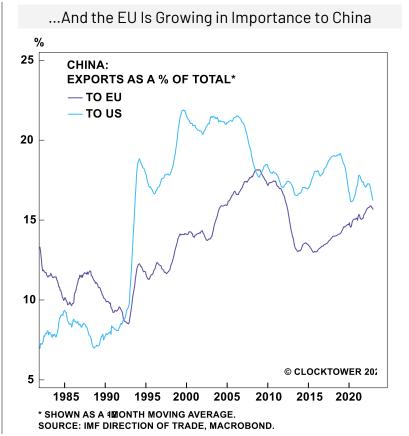




Peak China | The Importance of Sino-EU Relationship

The value of bilateral trade between China and the EU is now the world's largest, with China's export dependence on the European market gradually growing to match that of the US.



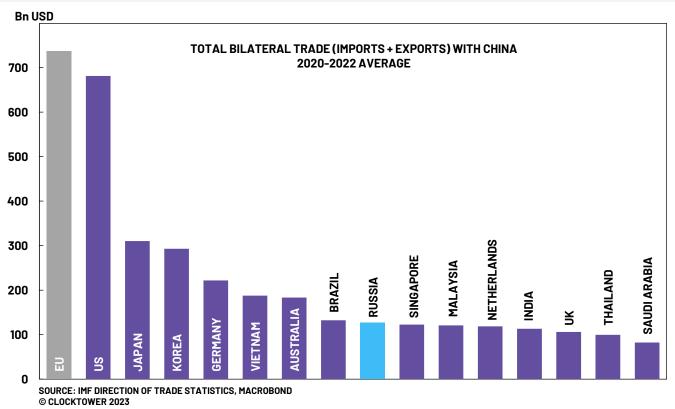




Peak China | Less Substance in Sino-Russia Partnership

The substance of the Sino-Russia comprehensive strategic partnership is far less significant than many think, particularly in the West.

Russia Is Not Even in the Top Five Trading Partners of China

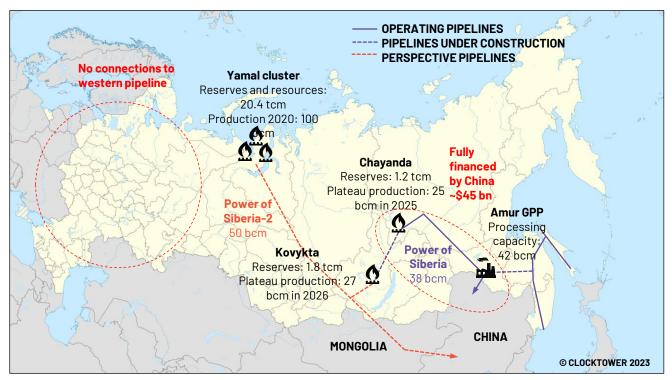




Peak China | Russia-China Infrastructure Links Are Paltry

Infrastructural needs for a robust Sino-Russian relationship are huge. They have not been built yet. Getting Yamal Peninsula gas to China would be one of the greatest infra projects ever attempted.

Russia-China Infrastructure Links Are Paltry

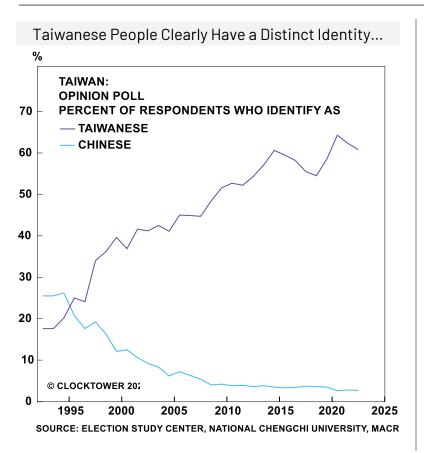


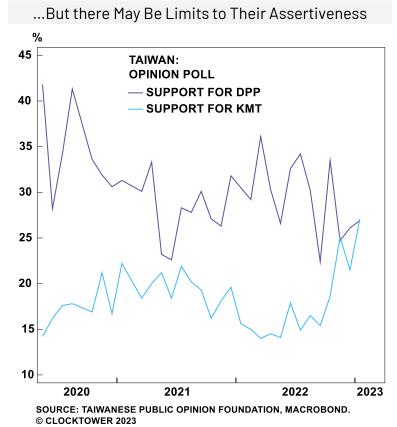
SOURCE: SONNENFELD, JEFFREY AND TIAN, STEVEN AND SOKOLOWSKI, FRANEK AND WYREBKOWSKI, MICHAL AND KASPROWICZ, MATEUSZ, BUSINESS RETREATS AND SANCTIONS ARE CRIPPLING THE RUSSIAN ECONOMY (JULY 19, 2022).



Peak China | Finally, Do Not Forget About Taiwan!

Yes, very few people in Taiwan still consider themselves as primarily "Chinese." The Taiwanese identity has ossified. However, **ruling DPP has seen its support collapse**. <u>Taiwan does not want to be Ukraine!</u>







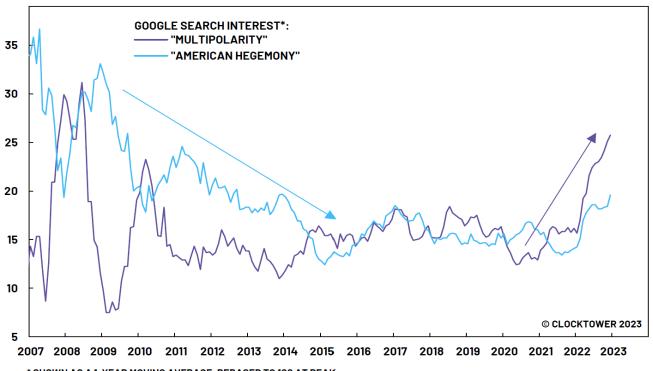
If China and Russia Are Constrained, Where Are the Risks?



Multipolarity | What Does Multipolarity Mean?

Multipolarity has become the buzzword of 2023! Russian and Chinese policymakers use it as part of their PR. American policymakers are unhappy about it. But what does it mean?

Multipolarity Is the Buzzword of 2023



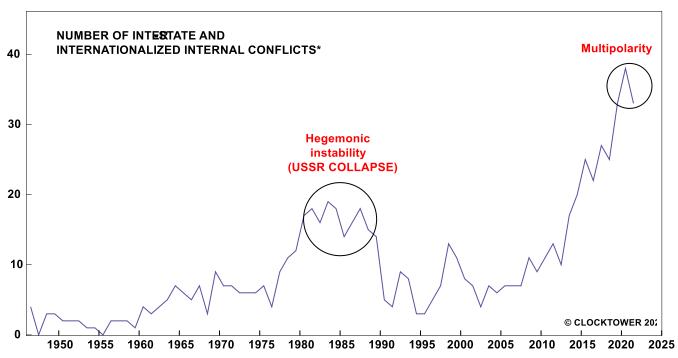
^{*} SHOWN AS A 1-YEAR MOVING AVERAGE. REBASED TO 100 AT PEAK. SOURCE: GOOGLE TRENDS.



Multipolarity | A Multipolar World Is Fraught With Risks

A multipolar world is one where a geopolitical equilibrium is tough to come by, military conflict is more likely, as is overall human suffering.

Multipolarity Leads to Higher Odds of Conflict



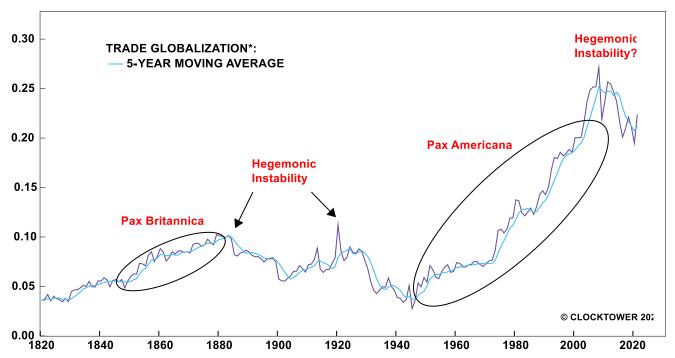
^{*} DEFINED AS THE NUMBER OF CONFLICTS BETWEEN TWO TYPES OF DYADS (PAIRS): INTERSTATE (#100HFLINDYDLIVE TWO STATES) I INTERNATIONALIZED INTERNAL CONFLICTS WHICH INVOLVE A STATE AND ORGANIZATION SUPPORTIMEDRES/TANIO. SOURCE: UPPSALA CONFLICT DATA PROGRAM.



Multipolarity | Globalization Weakens in Multipolarity

Multipolarity is also not ideal for globalziation. Without a hegemon to provide the expensive global public goods, globalization will fray, but not collapse completely.

We Are Living Through the Apex of Globalization

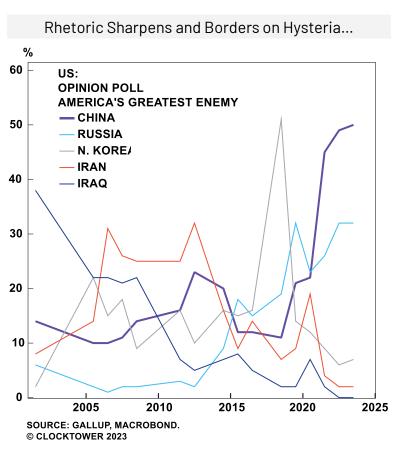


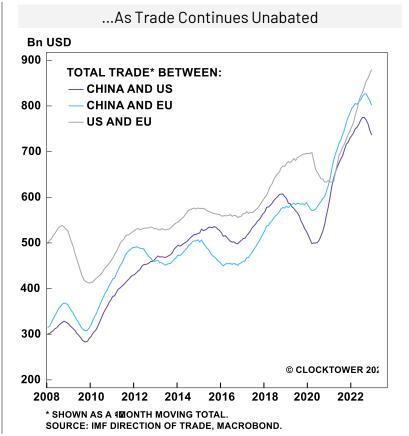
* TRADE GLOBALIZATION IS MEASURED BY IMPORTS AS PERCENTAGE OF GDP WEIGHTED BY POPULATION SOURCE: MACROBOND, BCA RESEARCH, COMMISSING C., KAWANO Y., AND BREWER B., "TRADE GIZZABIQIN SINCE 179 WAVESING FEGRATION IN THE WORLD SYSTEM," AMERICAN SOCIOLOGICAL REVIEW, VOL. 65, NO. 1 AND CLOCKTOWERNISASJUNICEATIEP94.



Multipolarity | A Geopolitical Paradox!

However, today we are observing a world where states have highly contentious relations, while trade continues unabated. How do we explain this paradox?

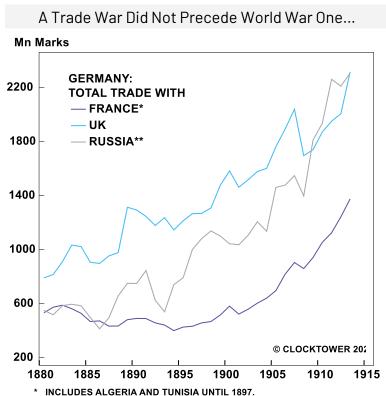




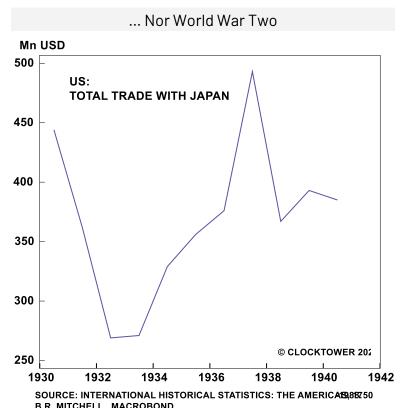


Multipolarity | This Is a Replay of the 19th Century

A multipolar global ordering of power does not lead to neatly decoupled economic spheres. Both history and political science teach us that trade between enemies continues.



^{**} INCLUDES FINLAND UNTIL 1897. SOURCE: B.R. MITCHELL, INTERNATIONAL HISTORICAL STATISTICS, EUROPE 1750 1988, MACROBOND.

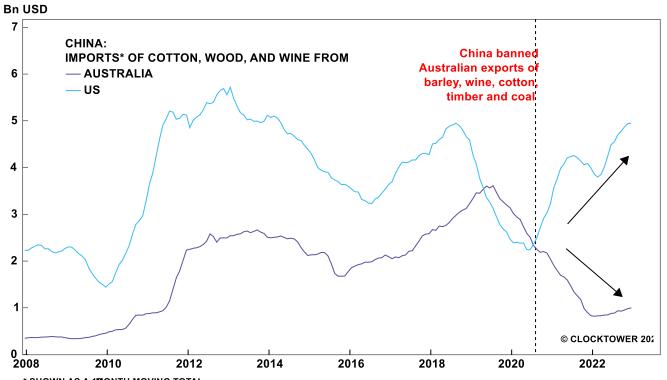




Multipolarity | Misjudging Multipolarity Is Folly!

The one country that does not understand that the world is multipolar is Australia. Its "loss" has been America's "gain," its purportedly strongest ally. That is multipolarity at work.

With Friends Like These... Who Needs Enemies?



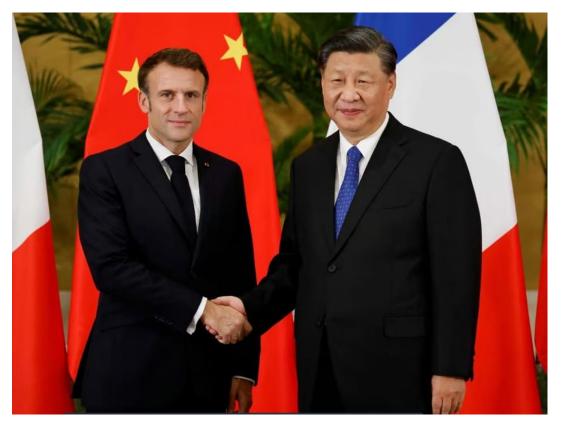
* SHOWN AS A 1DONTH MOVING TOTAL. SOURCE: MACROBOND.



Multipolarity | So No, Macron Is Not a "Traitor" to the West

The French president understands what geopolitical world his country inhabits, and he is defending its interests accordingly. Eventually, this "logic" takes over, preventing deglobalization.

"We can't afford to be locked out of that [China] market. Our competitor [Airbus] will jump right in." Boeing CEO David Calhoun



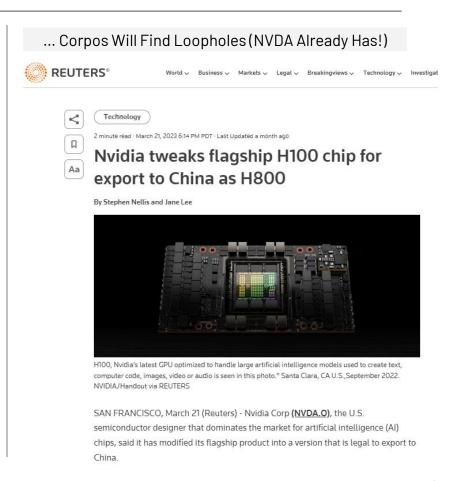


Multipolarity | And No... It Is Not Different With High Tech

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The Commerce Department semi export ban has been high contentious with both allies (Japan and the Netherlands) and US corporates. Both are already working against this *limited* move to subvert it.

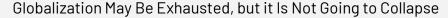
The US Chip Ban on China Is Highly Specialized... Advanced Advanced smartphones, Technology node: **CPU** for laptops, smartphones 7nm; 10nm supercomputers, and artificial intelligence, computers, crypto mining advanced **GPU** machines Advanced memory 14/16nm; chips, low-to-mid-end 20-22nm smartphone and computer CPU Digital signal processors, 28-32nm; Wifi/Bluetooth/GPS/NFC 45-65nm processors, memory chips Cruise missiles. airplanes, drones, satellites, Automobile micro-controller, base 65nmstation devices, micro-controller (MCU) automobiles. 0.13µm television, air for Internet of Things, radio frequency conditioners. identification chips, analog chips, power high-speed semiconductor devices railway, medical 0.13µm-Fingerprint sensors, low-end digital signal equipment, 0.15µm fridges, etc. processors, power management chips, power semiconductor devices, sensor chips

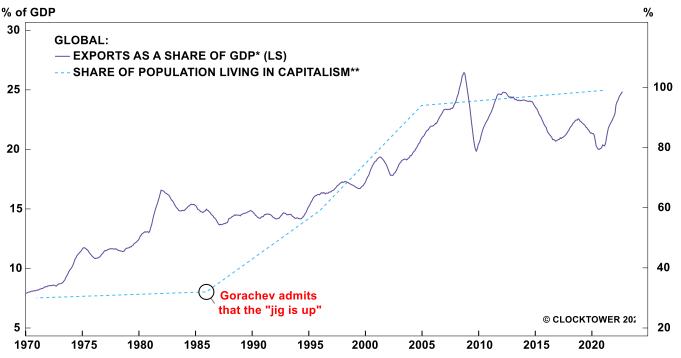




Multipolarity | We Are Far from 1970s

Instead of de-globalization, we will get *less efficient* globalization, but large swaths of human population will not be segmented into different geopolitical/political camps.





^{*} SOURCE: IMF.

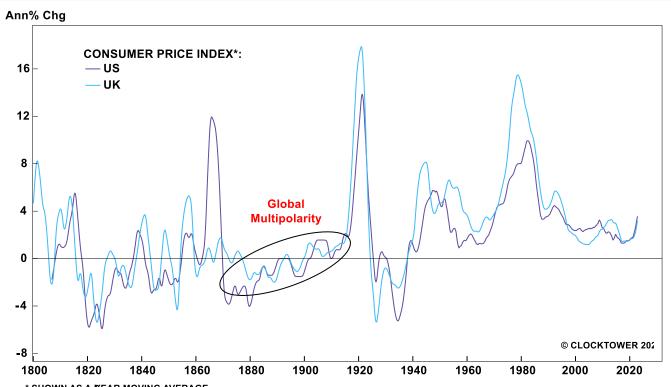
^{**} PERCENT OF GLOBAL POPULATION LIVING IN COUNTRIES WITH A FRASER INSTITUTE ECONOMINITEMEDIAL TO OR GREENTHAN FIVE. SOURCE: FRASER INSTITUTE, WORLD BANK.
SOURCE: BCA RESEARCH, MACROBOND.



Multipolarity | Multipolarity Is Therefore Not Inflationary

Yes, inflation will be higher than the current long-term inflation expectations... but don't expect it to become pernicious (unless you own a lot of bonds).

Globalization Is Not Necessarily Inflationary

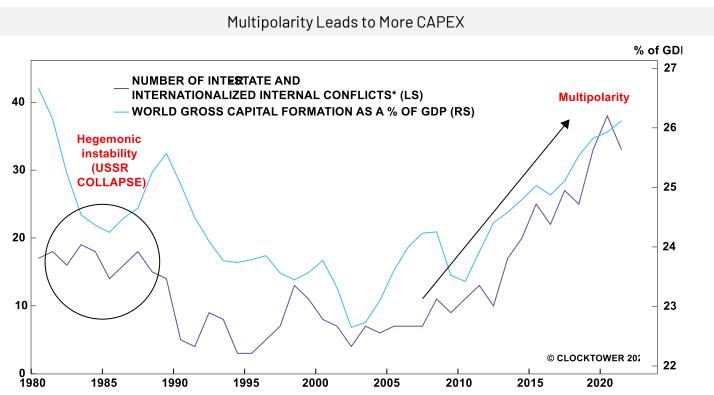


^{*} SHOWN AS A-YEAR MOVING AVERAGE. SOURCE: BANK OF ENGLAND, MINNEAPOLIS FED, MACROBOND.



Multipolarity | More Importantly, CAPEX Is Key

Multipolarity will incentivize capex. That is how this geopolitical ordering is inflationary. The redundancy prerogative – motivated by national security – will incentivize rebuilding of inefficient supply chains.



^{*} DEFINED AS THE NUMBER OF CONFLICTS BETWEEN TWO TYPES OF DYADS (PAIRS): INTERSTATE WEND ONLY TWO STATES, DISTRIBUTION SUPPORTED BY TANTE. SOURCE: UARS, CONFLICT DATA PROGRAM.

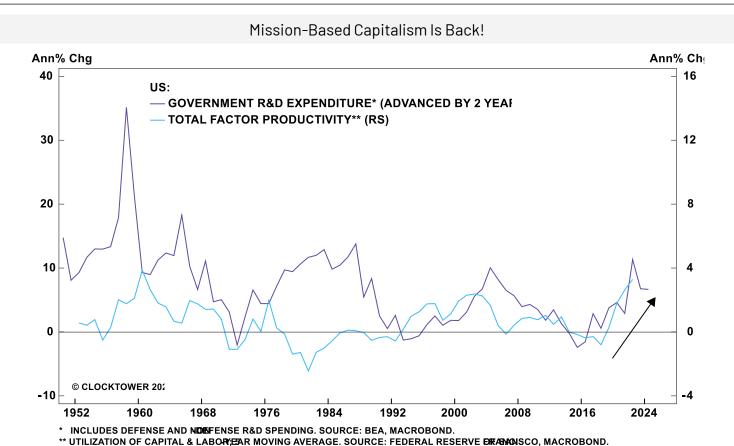
SOURCE: MACROBOND.

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Multipolarity | Government Is Back...

...and so is the statist/dirigiste approach to innovation and R&D, which has a much higher success rate than many investors are willing to admit.

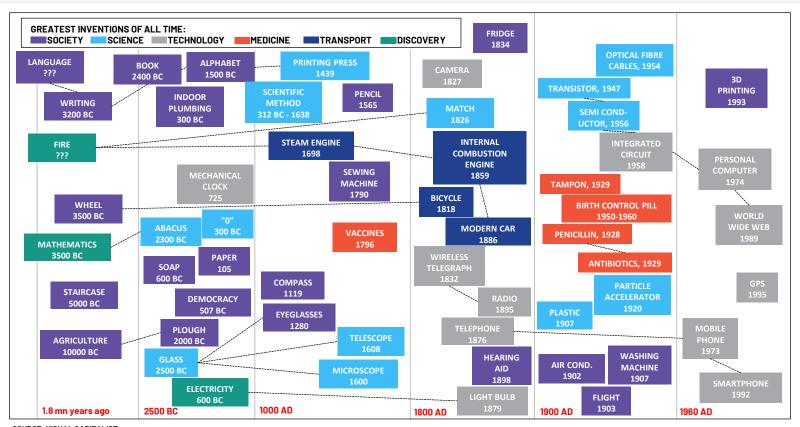




Multipolarity | Dirigisme Will Spur Meaningful Innovation

The state will spur game-changing technological innovation thanks to competition.







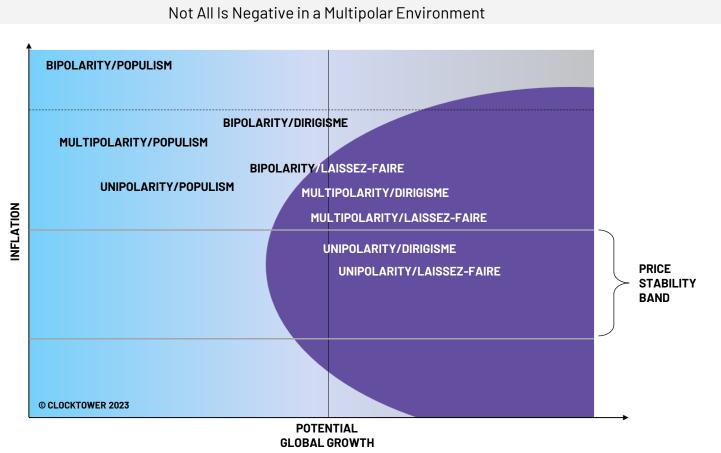
So What? | Multipolarity Is Not a Risk for Growth & Inflation

		GLOBAL DISTRIBUTION OF GEOPOLITICAL POWER				
		Unipolarity (25%)	Bipolarity (25%)	Multipolarity (50%)		
	Laissez-faire (25%)	 A unipolar order would see a renewed period of unfettered globalization, reducing global inefficiencies, and dampening inflationary pressures. A laissez-faire system would see the government take a back seat and encourage deregulation. Global free trade would not be impeded. Historical analogy: 1995-2010 Probability: 6.25% 	 A bipolar world order would see the degree of deglobalization deepen, creating global inefficiencies that provide a tailwind to inflation. A laissez-faire system would see the government take a back seat and encourage deregulation. Global free trade would not be impeded. Historical analogy: 1980-1995 Probability: 6.25% 	 A multipolar world would see globalization persist, albeit at a lower level than in its zenith decades 2000-2010. A laissez-faire system would see the government take a back seat and encourage deregulation. Global free trade would not be impeded. Historical analogy: 1918-1929 Probability: 12.5% 		
DOMESTIC POLITICAL SYSTEM	Dirigisme (50%)	 A unipolar order would see a renewed period of unfettered globalization, reducing global inefficiencies, and dampening inflationary pressures. A statist economic system would see the government take a more direct role in the economy, but not an outright debasement of currency and assets. Historical analogy: Unclear Probability: 12.5% 	 A bipolar world order would see the degree of deglobalization deepen, creating global inefficiencies that provide a tailwind to inflation. A statist economic system would see the government take a more direct role in the economy, but not an outright debasement of currency and assets. Historical analogy: 1945-1980 Probability: 12.5% 	 A multipolar world would see globalization persist, albeit at a lower level than in its zenith decades 2000-2010. A statist economic system would see the government take a more direct role in the economy, but not an outright debasement of currency and assets. Historical analogy: 1945-1980 Probability: 25% 		
	Populism (25%)	 A unipolar order would see a renewed period of unfettered globalization, reducing global inefficiencies, and dampening inflationary pressures. A populist economic system would see policymakers seek to generate nominal GDP growth with little regard to long-term consequences. Historical analogy: Unclear Probability: 6.25% 	 A bipolar world order would see the degree of deglobalization deepen, creating global inefficiencies that provide a tailwind to inflation. A populist economic system would see policymakers seek to generate nominal GDP growth with little regard to long-term consequences. Historical analogy: Unclear Probability: 6.25% 	 A multipolar world would see globalization persist, albeit at a lower level than in its zenith decades 2000-2010. A populist economic system would see policymakers seek to generate nominal GDP growth with little regard to long-term consequences. Historical analogy: 1929-1940 Probability: 12.5% 		



So What? | Slightly Inflationary & Good for Growth

A multipolar world that does not descend into outright populism should be positive for growth and somewhat inflationary. But somewhat higher inflation than arbitrary CB target is not tragic!

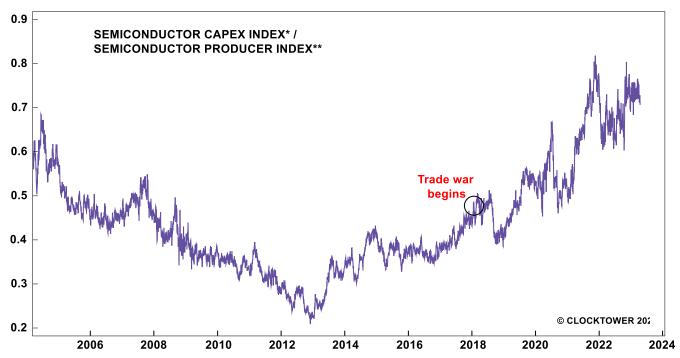




So What? | Long Capex, Short Producers

Manufacturers are the biggest losers as they will have to dip into revenues to build out new capacity according to the whims of Washington and Beijing. <u>Long Capex, Short Producers</u>.

Long Capex, Short Producers



^{*} INCLUDES AMAT, LRCX, KLAC, MKSI, AEIS, BRKS, TER, ASML, TOELY.

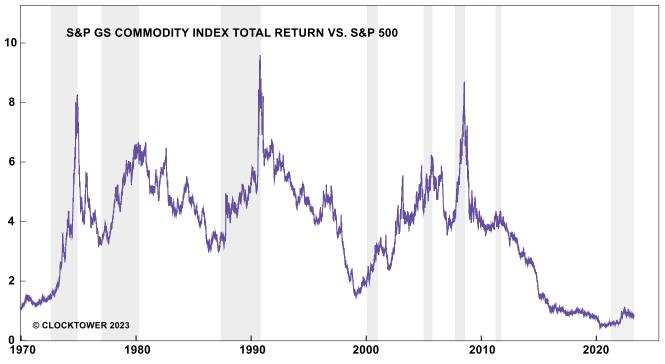
^{**} INCLUDES TSMC, SAMSUNG, UMC, SMIC. SOURCE: MACROBOND.



So What? | We Are in a Commodity Supercycle Decade

The 2020s will be characterized by a decade of building stuff out of atoms, not bytes. **As such, invest in commodities on a long-term horizon, even if they are overstretched in the short-term**.

A Decade of Atoms



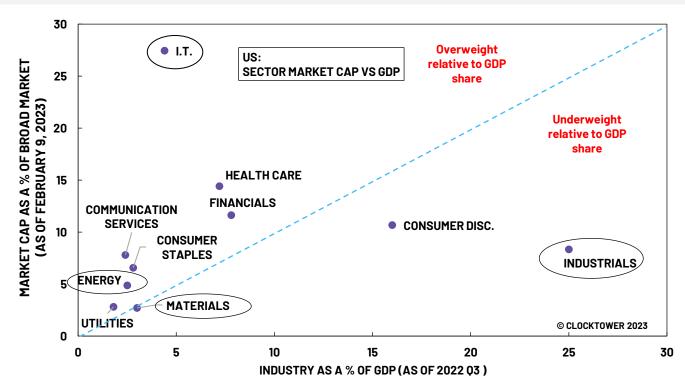
NOTE: SHADED AREAS DENOTE HIGH (>3%) AND RISING INFLATION. SOURCE: MACROBOND.



So What? | The Tech Decade Is Over

The bottom line is that investors should short tech <u>and go long the</u> <u>sectors of multipolarity: industrials, materials, and commodities</u>.

Go Long Kinetic, Short Computational



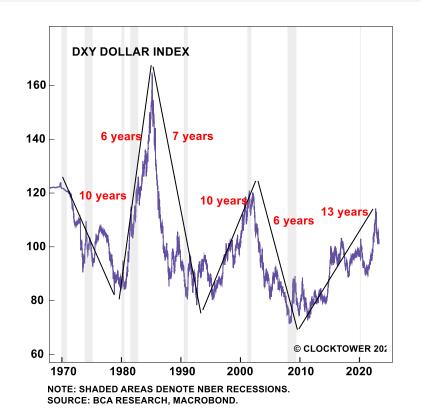
SOURCE: BEA, MACROBOND, CLOCKTOWER CALCULATIONS.



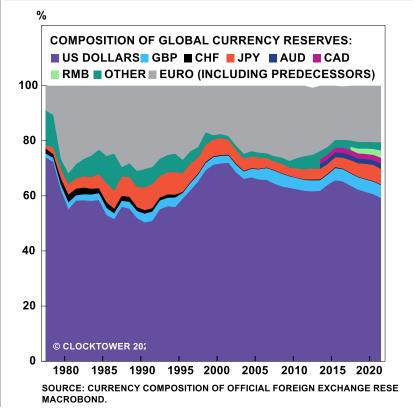
So What? | Short USD? Sure... But Not Because of Geopolitics

We could list 99 reasons to be short USD at this moment but doing so because of geopolitics is difficult. Yes, multipolarity should be a headwind for USD as a reserve asset, but it won't be dramatic.

The Greenback Was in a Bear Market at Height of US Power...



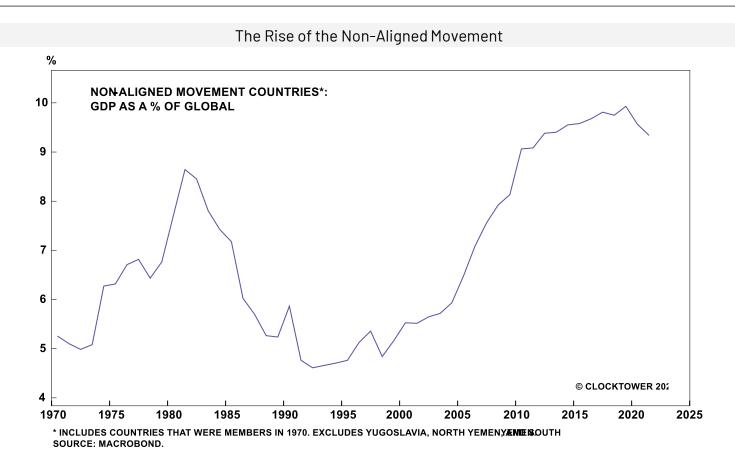
... Biggest Beneficiaries of Multipolarity Are (Probably) Gold & EUR





So What? | Invest in the Non-Aligned Countries

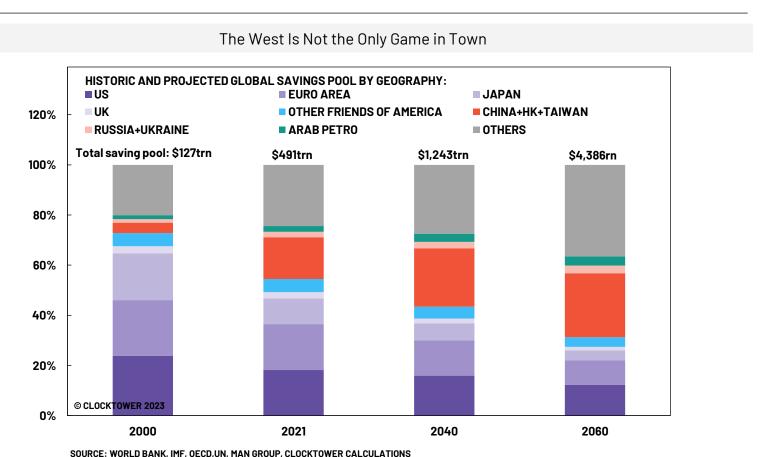
A multipolar distribution of power will give an upper hand to middle and large powers that can play different camps against one another. Watch India, Indonesia, Vietnam, Latin America, KSA, etc.





So What? | Global Pool of Savings Is Also Multipolar

Don't want to invest in EMs because of ESG? A multipolar world is no longer dominated by the West. If you want to stay out of Country X for ESG reasons, that is a "sin premium" someone else will willingly harvest.

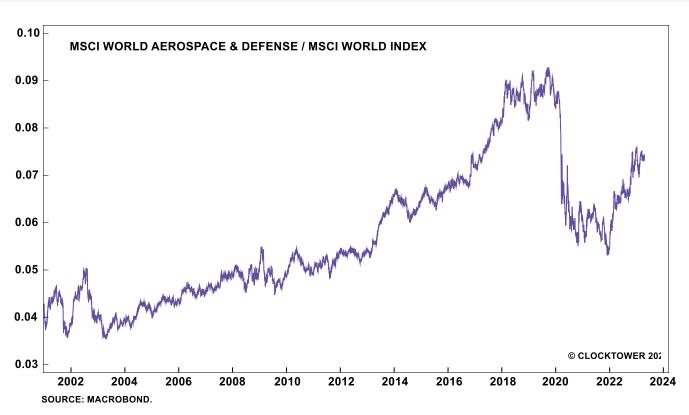




So What? | Ok Fine... Also Go Long Defense Stocks!

Yes... geopolitical multipolarity will also be a boon for defense stocks!

Long Defense Stocks... But Make Sure to Diversify Your Risk





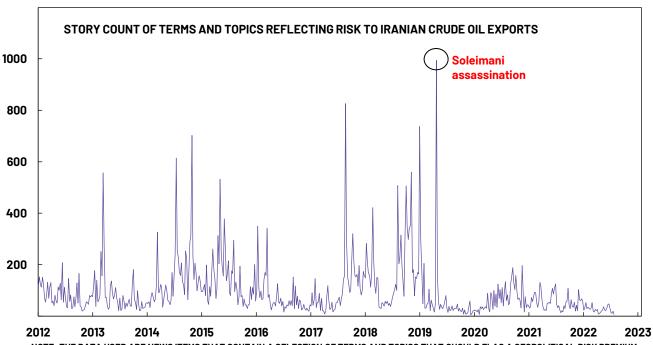
Three Risks to Consider



Middle East | The Media/Market Is Overly Sanguine

Most of the media obsesses about Ukraine and US-China tensions. Very little attention is paid to the risks to oil supply out of Middle East. This is a mistake. Iranian and Israeli domestic politics are a risk.

Risk to Iranian Oil Supply (Sanctions and/or War) Is too Low



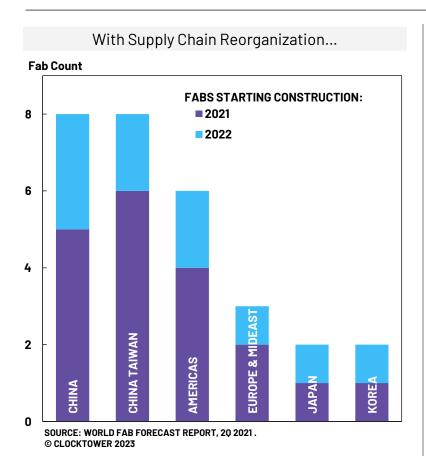
NOTE: THE DATA USED ARE NEWS ITEMS THAT CONTAIN A SELECTION OF TERMS AND TOPICS THAT SHOULD FLAG A GEOPOLITICAL RISK PREMIUM ON OIL PRICES DUE TO THE RSK OF IRAN SANCTIONS AND/OR CONFLICT.
SOURCE: BLOOMBERG FINANCE L.P.

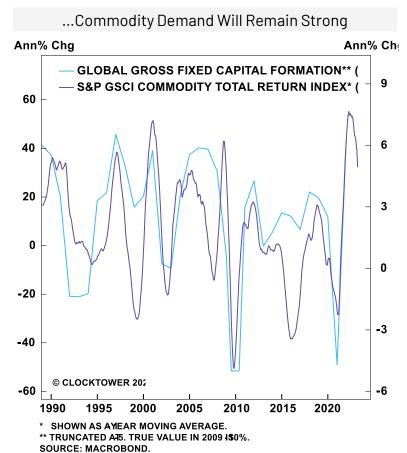
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Commodities | Supply Chains Are Being Redrawn...

...Due to geopolitical risks and national security concerns. On top of that, the green energy revolution will continue to create new demand for industrial metals. This global capex push will raise prices.

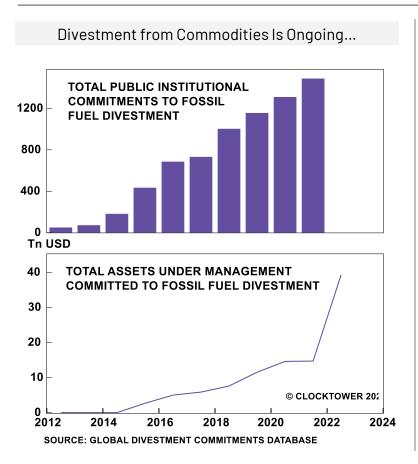


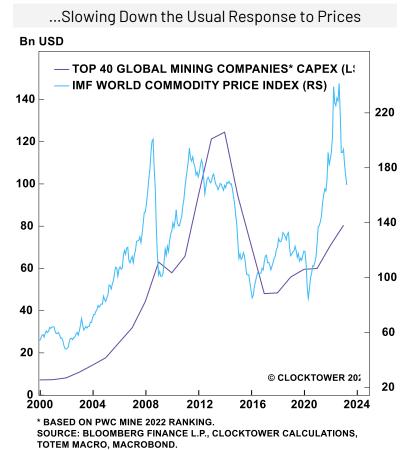




Commodities | Capex Has Not Responded to Prices

But while global capex is on the rise, actual capital investment in commodities will continue to lag. The main reason is that the ESG agenda has made it difficult to plan for long-term projects.



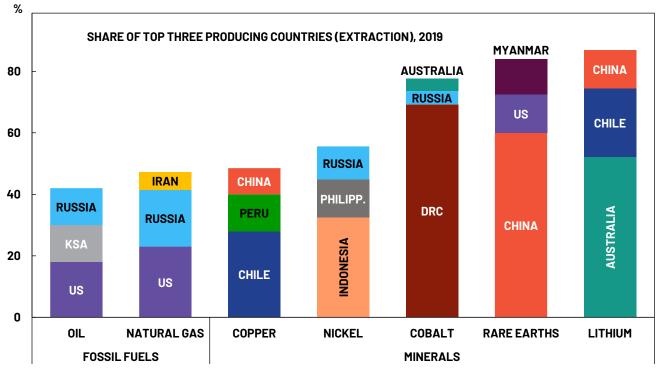




Commodities | Green Commodities Are Concentrated

Unlike fossil fuels, the commodities necessary for the green energy transition are often concentrated in geopolitically unsafe countries.

Commodities Necessary for the Green Energy Transition Are Concentrated in Often Insecure Countries



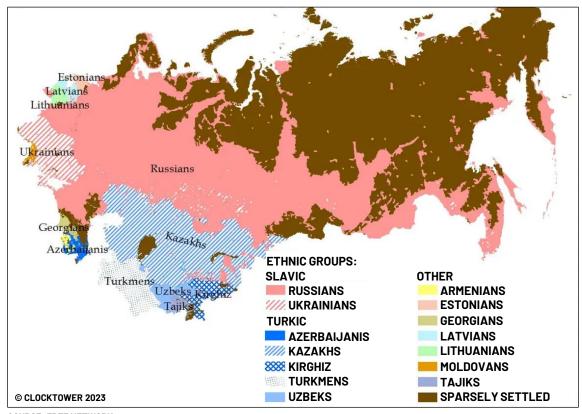
SOURCE: ""THE ROLE OF CRITICAL MINERALS IN CLEAN ENERGY TRANSITIONS," IEA. © CLOCKTOWER 2023



Commodities | Russia Is Critical for Commodities...

...and it is now engaged in a geopolitical conflict with potential domestic uncertainty over the rest of the decade.

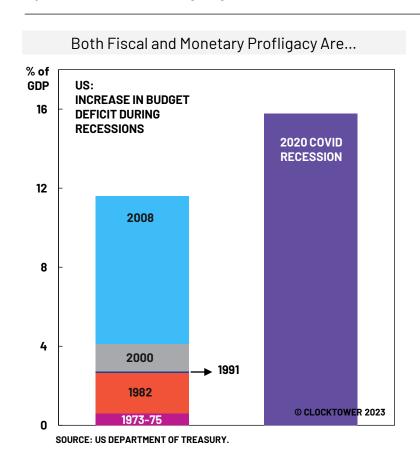
Watch Domestic Stability in Russia

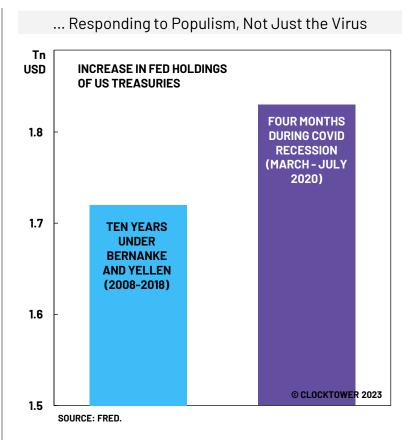




US Politics | The Pandemic Did Not Cause the Stimulus

While it is impossible to prove, we would argue that policymakers would have responded to any recession with gargantuan stimulus. As the pandemic dissipates, unorthodoxy will not.

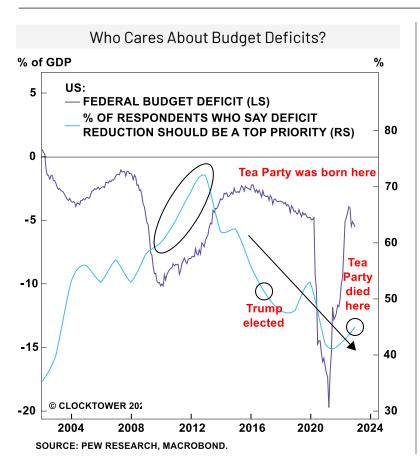


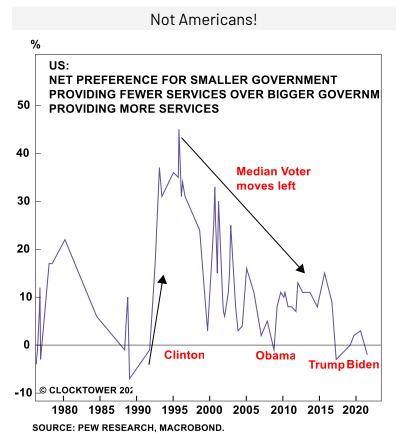




US Politics | US Voters Are Not Interested in Orthodoxy

The US median voter is not interested in orthodoxy or austerity. They remain scared by the secular stagnation cycle. As such, a recession will see another significant policy response.

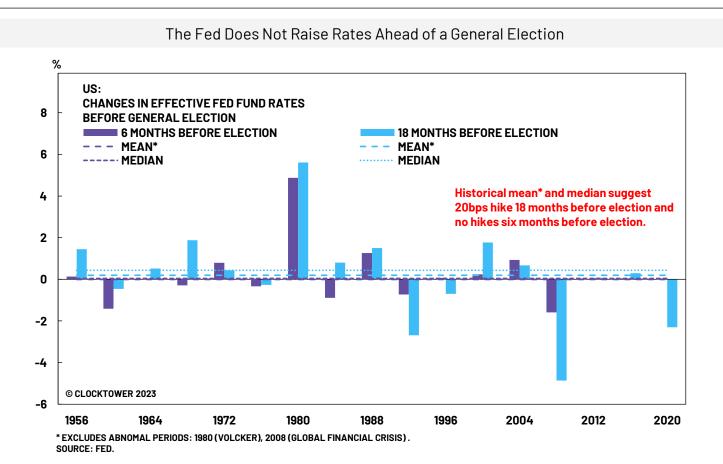






US Elections | The Fed Is Pausing...

...Just as its window for hawkishness nears its end. **Eight months from now, that window will close, with US presidential elections 12 months away**. The Fed has almost never raised rates ahead of the election.



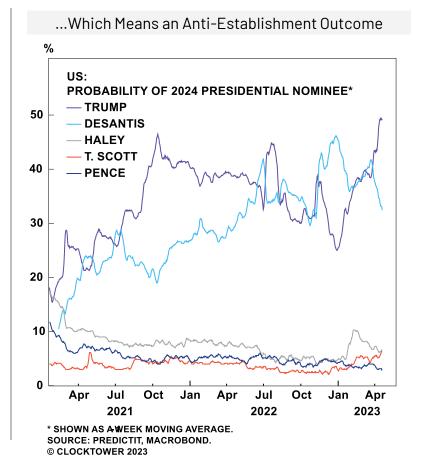


US Elections | US Domestic Politics

The US election in 2024 could be highly contentious. If Donald Trump wins the GOP primary, a recession could put a genuine anti-establishment candidate in the White House.

The Incumbent Party Loses After a Recession...

Election Year	Recession in 18 months leading up to election?	Who won presidency?	Winning party
2020	YES	Opposition	D
2016	NO	Opposition	R
2012	NO	Incumbent	D
2008	YES	Opposition	D
2004	NO	Incumbent	R
2000	NO	Opposition	R
1996	NO	Incumbent	D
1992	NO	Opposition	D
1988	NO	Incumbent	R
1984	NO	Incumbent	R
1980	YES	Opposition	R
1976	NO	Opposition	D
1972	NO	Incumbent	R
1968	NO	Opposition	R
1964	NO	Incumbent	D
1960	YES	Opposition	D
1956	NO	Incumbent	R
1952	NO	Opposition	R
1948	NO	Incumbent	D
1944	NO	Incumbent	D
1940	NO	Incumbent	D





Questions/Comments?

Please email Marko Papic and team at research@clocktowergroup.com



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