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The Implications of Russia's War in Ukraine on Eurozone Bank Exposure

Jon Pike
Middlebury Institute of International Studies
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Abstract

The Russian invasion of Ukraine concluded a thirty-year post-Cold war cycle defined by relative European peace and Western predominance underpinned by unipolarity. Russia's invasion and the subsequent global response represent a fundamental recalibration of the rules-based international order.
The uncertainty inherent to the war's prosecution will have a lasting, complex impact on global markets, while the precarity surrounding the war's resolution presents significant investment risks and opportunities across sectors. This paper employs scenario analysis' techniques to consider the critical uncertainties precipitated by the war in Ukraine and tethers the corresponding, foremost implications to forward-looking investment strategies considering asset allocations to Eurozone banks. The analysis endeavors to provide actionable assessments and recommendations organized around four alternative futures that investment strategies may encounter mapped outward to 2027.

Table of Contents

Executive Summary

Introduction

The Russian invasion of Ukraine concluded a thirty-year post-Cold war cycle defined by relative European peace and Western predominance underpinned by unipolarity. Russia's invasion and the subsequent global response represent a fundamental recalibration of the rules-based international order. How the West manages the uncertainties precipitated by the war's prosecution will have a lasting, complex impact on global markets. The precarity surrounding the war's stable resolution presents significant investment risks and opportunities across sectors.

The proceeding scenario analysis considers the critical uncertainties precipitated by the war in Ukraine and tethers the corresponding, foremost implications to forward-looking investment strategies. The analysis endeavors to provide actionable assessments and recommendations organized around four alternative futures that investment strategies may encounter mapped outward to 2027.

The analysis suggests four broad recommendations (tethered to a specific set of governing uncertainties) that seek to balance the risks and opportunities inherent to volatile postwar futures.

Recommendations:

Understand the Salience of Bond Yields and Eurozone Banks' Exposure: As bond yields rise across emerging economies, investment strategies must monitor debt-to-GDP ratios and limit exposure to countries with high default risk.

Confront Deglobalization: Export controls and underlying protectionist policy threaten geopolitical stability and the continuity of global markets.

Broadened Conception of Strategic Autonomy: Should a stable postwar habitat emerge, the EU may expand its conception of strategic autonomy to encompass broader economic objectives, likely providing Eurozone banks with a spectrum of lending opportunities.

Food Security and Global Markets: Investment strategies should prepare for the prolonged impact of the expanding global food crisis on political instability and global markets.

Organizational Structure

Chapter One: Investment Strategy Proposal
Chapter Two: Investment Outlook Variables
Chapter Three: Scenarios
Chapter Four: Scenario Narrative Implications
Chapter Five: Recommendations

Chapter One: Investment Strategy Proposal

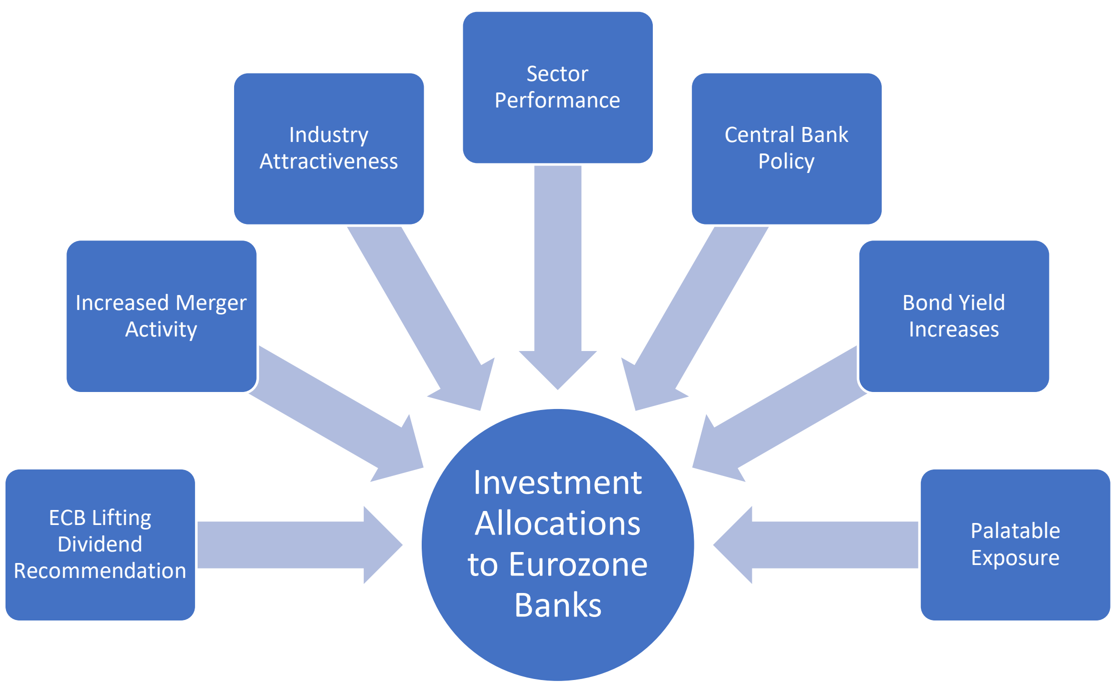
Chapter One presents arguments for pursuing an investment strategy organized around increased allocations to Eurozone banks. Chapter One also describes the analysis' investment proxy mechanism and conducts a diagnostic of the proxy firm, BNP Paribas. The purpose of the proxy mechanism is to present a snapshot of a specific Eurozone bank, thus providing analytical context for the broader euro area banking sector.

Strategic Overview: The Eurozone banking sector remains overweight and attractive in the long term. Following Russia's invasion of Ukraine, increased exposure to Eurozone banks captures the inherent advantages of underlying market volatility and fortuitous regulatory developments. Moreover, as the US and Germany expand heavy arms exports to Ukraine, Eurozone bank exposure provides positions capable of absorbing incremental, stabilizing macroeconomic shifts. Finally, in 2021, the Eurozone banking sector was the top-performing group within the STOXX 600 Index. A stabilized macroeconomic environment may allow banks to recapture 2021's performance by building upon 2022's underlying advantages (cheap valuations, central bank policy, and the ECB's rescission of its dividend recommendation).

Uncertainties:

- Macroeconomic environment[1]
- Market volatility
- Evolving exposure to Russia and Ukraine
- Central bank policy
- Adverse security developments (expansion of the war into Eastern Europe and the Baltics)

Exposure to Ukraine and Russia: The Banks Index has limited aggregate exposure to Ukraine and Russia due to operational shifts following the Russian invasion of Crimea. Institutional credit ratings are likely not in jeopardy, as rating agencies observe the "modest materiality in terms of the groups' total exposure and the ample local deposit funding of the subsidiaries, which historically has held up well in previous times of stress."[2]



[1] Macroeconomic determinants have a significant impact on Eurozone bank valuations, particularly P/B ratios: https://www.ecb.europa.eu/pub/financial-stability/fsr/focus/2019/pdf/ecb~a18359e8d9.fsrbox201905_05.pdf

[2] S&P Global, Credit FAQ: https://www.spglobal.com/ratings/en/research/articles/220323-credit-faq-how-the-russia-ukraine-conflict-is-affecting-ratings-and-the-global-economy-12318589

Figure 1: Variables supporting investment allocations to Eurozone banks

Chapter Two: Investment Outlook Variables

Chapter Two examines variables that impact the investment strategy outward to 2027. Two categories organize the variables: Foreign Policy and Macroeconomics.

Foreign Policy Considerations:

- *Defense Expenditure and Budgetary Provisions*: Aggregate Western defense expenditures and specific budgetary provisions inform defense industry forecasts, contribute to practical European stability, and support an indefinite US contestation policy. In 2020, aggregate EU defense expenditure was 1.5% of GDP.[3] Furthermore, on February 27, 2022, Chancellor Olaf Scholz announced Germany's (a modern standard of conservative military expenditures) commitment to increasing national defense expenditures above NATO's 2% of GDP threshold (Germany's 2020 expenditure was 1.4% of GDP).[4]
- *Western Sanctions*: The composition of Western sanctions and the fluctuating extent to which these sanctions comprehensively target Russian oil exports continue to impact global economic systems. The EU has stated that its target date for fully realized energy independence is 2030. The possible contraction of this timeline has security and geopolitical implications for Western allies.
- *The Resilience of Multilateral Institutions*: Fragmentation threatens the viability of multilateral institutions.
- *Taiwan Developments*: Precarious cross-strait relations represent a primary driver of regional instability. China consistently sends J-16 and J-10 warplanes into Taiwan's airspace, and, in response to Russia's invasion, President Tsai raised the alert level of Taiwan's military in February 2022.[5] However, it remains unclear how China will ultimately incorporate the Russia-Ukraine war into its strategic calculus.

Macroeconomic Considerations:

- *Emerging Economies*: Emerging economies observe increased inflation "driven primarily by higher commodity prices, supply chain disruptions, labor shortages, and a surge in demand for goods."[6] Additionally, in a swath of emerging markets, the government debt to GDP ratio increased by 10 percent, increasing the probability of subsequent sovereign debt defaults.[7]
- *Trade*: International trade underperforms in the wake of the Russian invasion. The United Nations (UN) estimates that "World merchandise trade volume is expected to grow just 3 percent this year, down from the previous forecast of 4.7 percent, and 3.4 percent in 2023".[8] Additionally, port congestion limits shipping functionality and impedes supply chain recovery.
- *Supply Chain*: The war diminishes global supply chain functionality. Europe's overdependence on Russian crude oil and natural gas tempers the effectiveness of Western sanctions. Further, Europe's reliance on Ukrainian and Russian agricultural commodities and fertilizer products

[3] Reuters February 2022: https://www.reuters.com/business/aerospace-defense/germany-hike-defense-spending-scholz-says-further-policy-shift-2022-02-27/
[4] Ibid.
[5] Reuters February 23, 2022: https://www.reuters.com/world/asia-pacific/taiwan-says-must-raise-alertness-over-ukraine-crisis-2022-02-23/
[6] Deloitte February 2022: https://www2.deloitte.com/us/en/insights/economy/emerging-markets-outlook.html
[7] Ibid.
[8] UN April 2022: https://news.un.org/en/story/2022/04/1116052

impedes global food distribution and likely alters crop yield projections.[9] Russia buttresses global caloric commodity markets, which complicates near and medium-term recovery.[10]

- *Central Bank Policy*: Central banks explore policies designed to temper inflation. On April 21, 2022, Federal Reserve Chair Jerome Powell suggested imminent half-point interest-rate increases to address inflationary pressure. The European Central Bank also indicated interest-rate increases scheduled for July 2022.[11]
- *Global Credit Markets*: Bond yields increase across Europe, predicting political instability. Eurozone banks with significant exposure to Russia pursue damage mitigation strategies. Cross-regional emerging economy defaults threaten the global economy as national governments contend with the twinning crises of unsustainable debt service requirements (primarily precipitated by the pandemic and rising interest rates) and the war in Ukraine's impact on energy and food prices.
- *Sub-Saharan Africa*: Successive coups, fraudulent elections, and unconstitutional change of government events continue to threaten the stability of national governments. Food shortages and rising energy prices contribute to increased political instability. Deficient security policies endanger the functionality of national economies and jeopardize investment in the extractive sector. The proliferation of anocratic regimes increases the probability of civil war and subsequent regional spillover.[12]
- *European Strategic Autonomy*: The EU fails to codify a more expansive conception of strategic autonomy (a more independent Europe) that includes defense, economic, energy sourcing, and social considerations. The broad historical spectrum of security issues consistently evolves and encompasses hard and soft power expressions. The argument to expand the conception of strategic autonomy has "largely been driven by the EU's External Action Service (EEAS) and also reflects the systemic challenge posed by political and economic competition with countries such as China or Russia, who make use of all levers of power (beyond military instruments) to compete below the threshold of open armed conflict."[13]

Chapter Three: Scenarios[14]

Chapter Three presents four war outcome and implication scenarios, mapped outward to 2027, that consider the possible termini for the war and the potential properties of global macroeconomic, geopolitical, and security habitats following Russia's war in Ukraine. The war outcome and implication scenarios provide four logically consistent possible futures. The implication scenarios, buttressed by the analytically mapped war outcomes, present a broad spectrum of projections expressing four reasonable trajectories considered outward to 2027.

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[9] Deloitte March 2022: https://www2.deloitte.com/us/en/insights/focus/supply-chain/supply-chain-war-russia-ukraine.html

[10] A recent Deloitte report states that "The principal reason that Russia plays above its weight is that it is a major exporter of some of the world's most important commodities."

[11] Bloomberg April 21, 2022: https://www.bloomberg.com/news/articles/2022-04-20/ecb-could-hike-interest-rates-as-soon-as-july-kazaks-says

[12] Anocracy, briefly defined, is a regime that expresses, at once, features of democratic and autocratic governance.

[13] Rand, "European Strategic Autonomy in Defense," 2021.

[14] See Annex and Numerical Methodology for detailed description of scenario methodology.
Annex Link: https://acrobat.adobe.com/link/track?uri=urn:aaid:scds:US:793cd78f-dd44-36d3-a8fe-8f6fa8f20d50
Numerical Methodology Link: https://1drv.ms/x/s!AvYKU8Ab4k1KlBATHxKUFMEVNXye

Figure 2: Ten Selected Factors Influencing War Outcome

Identification and Brief Summary of the Four War Outcome Scenarios:

Foundational War Scenario Question: What will war outcomes look like in 2022-2023?

War Outcome Scenario 1: Russian Withdrawal
Overview: Agreement reached regarding Russian control of Donbas.
Outcome: Putin's relative political strength and the degree of sustained Russian military organization following the withdrawal have determined the provisions of a negotiated peace settlement. While Putin's bargaining capital has remained limited, the West agreed to lift selected sanctions targeting the Russian economy in exchange for troop withdrawal from Ukraine (excluding Russian enclaves). NATO has expanded to include Sweden and Finland and has agreed to immediate discussions concerning Russian-centric security assurances. The conclusion of the war and the success of subsequent peace talks have engendered a new security architecture in Europe. The EU and NATO have prioritized strategic autonomy and significantly increased aggregate defense spending.

War Outcome Scenario 2: Stalemate
Overview: Ukraine has become a highly archipelagic Russian-occupied state.
Outcome: Western materiel and intelligence support have allowed the insurgency to consistently disrupt Russian control and exact ever-increasing costs for the occupation. The insurgency and occupation have existed indefinitely in a habitat of unceasing precarity. The occupying forces have been unable to establish themselves fully, and Putin has not realized his organizing objectives. The risk of a Eurozone recession has increased as US sanctions have included Russian oil exports, and energy prices have

continued to rise. China has sustained diplomatic and propagandistic support, supplied arms, and continued its economic relationship with Russia.

War Outcome Scenario 3: Highly repressive occupation of archipelagic Ukraine
Overview: Ukraine's fragmentary control is primarily limited to western regions coupled with the partial reestablishment of Soviet Union territories.
Outcome: Given the highly repressive nature of the occupation, limited arms transfers, and ineffectiveness of the insurgency, an occupation government has become increasingly realized. Russian occupying forces have established an unstable administration. Sanctions, including US/EU targeting of Russian oil exports, have battered the Russian economy and isolated Russian citizens. With Ukraine partially occupied and Russia's internal dissent adequately suppressed, Putin has expanded his territorial pursuits to include states that once comprised the Soviet Union. His ultimate objective has been to reconstitute the Soviet Union.

War Outcome Scenario 4: Direct NATO-Russia war
Overview: NATO upholds Article V.
Outcome: A NATO-Russian war has represented the most devastating global geopolitical and economic outcome. The European continent has existed in a highly precarious, unstable geopolitical environment against US/EU sanctions on Russian oil exports. The active prosecution of a war with Russia has raised energy prices and precipitated a global recession. The West has not sufficiently addressed the refugee crisis due to ongoing conflict and collapsing national economies. The EU economy has continued to contract, and domestic political instability has increased. China has provided economic support to Russia but has publicly distanced itself from Russian action. A procedural coup prosecuted by the Russian military and elites has threatened Putin's rule.

Identification and Brief Summary of the Four Implication Scenarios:

Implication Scenario 1: A Unified and Aggressive West
Overview: Europe realizes an increasingly complete iteration of strategic autonomy and supports coordinated US-EU bilateral contestation of China and Russia.
Outcome: The credibility of NATO and Western alliance systems more broadly has increased. In the immediate postwar years, the West was highly cooperative. This galvanization has allowed Western nations to pursue unified, aggressive policies that limit Russian and Chinese strategic power expansion. Moreover, military interoperability has supported the full realization of European strategic autonomy in defense. Finally, the EU and US have worked together to organize energy security considerations and mitigate risk.

Commodity markets have largely stabilized. Global bond yields have returned to prewar levels. The US and EU have increasingly coordinated energy and raw material sourcing while jointly supporting emerging economies and facilitating foreign investment. In addition, western states have taken measures to address global supply chain functionality and resilience.

Implication Scenario 2: **New Species of Combative Multipolarity**
Overview: Great power dysfunction and cross-categorical contestation destabilize global systems.
Outcome: The realization of strategic autonomy in defense has increased the credibility of NATO. Hostilities have threatened the future of the NPT and European arms control more broadly. The strategic relationship between China and Russia has continued (though less publicly). The functionality of multilateral institutions has remained constant, and cooperation on climate change and trade has remained relatively stable. Multipolarity has devolved from competitive to combative in security and third-party resource sourcing policy areas.

Commodity markets have remained volatile while the threat of sovereign debt defaults has diminished investor confidence. Moreover, combative actions have defined the US, Russia, and China's approach in Sub-Saharan Africa, while the region's resource-producing states have experienced increased domestic instability due to food shortages and a destabilized extractive sector. Ultimately, combative multipolarity has permitted functional global systems, but the precarity of the Ukraine-Russia stalemate has profoundly destabilized the international order.

Implication Scenario 3: **Entrenched Global Fragmentation**
Overview: Decreased NATO integration, sovereign debt defaults, a fracturing Western alliance system, and increasingly adversarial relations between the US and China contribute to global dysfunction.
Outcome: Fragmented alliance systems have exacerbated global instability. China and Russia have caused profound dysfunction and consistent imbalance in the WTO, negatively impacting the global economy and international trade. The EU has accelerated strategic autonomy objectives, but the transatlantic partnership has frayed beneath rising energy costs and the economic and political fallout of the refugee crisis. Russia's expansion of hostilities into former Soviet states has precipitated sovereign debt defaults and has increased the probability of a NATO-Russian war. The West has contested Russian and Chinese influence in Sub-Saharan Africa's emerging economies and expanded its presence in the Arctic to combat Russian and Chinese belligerence. As a result, globalization has lost much of its dynamism and has become increasingly fragmented. Western leaders have addressed the waning support of domestic populations by exhibiting divergent decision-making regarding Russian sanctions and NATO's strategic objectives. Aggregate global fragmentation has become increasingly entrenched, exacerbating the precarity of international markets and economies.

Implication Scenario 4: **Aggressive Bifurcation**
Overview: The West and the China-Russia asymmetrical duumvirate administer competing spheres of influence.
Outcome: The world has experienced a fundamental shift in the international order. The West and the China-Russia "asymmetrical duumvirate" have engaged in limited trade and diplomacy. NATO has sustained its integration while European strategic autonomy has increased military interoperability. The war has galvanized the transatlantic relationship. The global security situation has deteriorated on five fronts: the open NATO-Russia war, the Arctic, the Taiwan Strait, Sub-Saharan Africa, and nuclear proliferation. The global recession, deglobalization, and contracting international trade have exacerbated security concerns. Sovereign debt defaults have jeopardized markets and upended domestic economies. Western powers have explored new energy and raw material sources as basic material costs have risen.

Chapter Four: Scenario Narrative Implications

Chapter Four explores the implications of the four scenario narratives on the investment strategy. Each implication corresponds to a specific set of governing uncertainties. Finally, each suite of implications includes the description of a plausible black swan event to ensure the investment strategy's anticipatory resilience when encountering low probability-high impact events.

Implications for Scenario 1: A Unified and Aggressive West

- **Eurozone banks benefit from a high degree of EU institutional quality**: Continued EU cohesion is essential to stabilizing markets, engendering investor confidence, and increasing foreign investment. The aggregate financial impacts of this broadly stabilized environment on

Eurozone banks include robust balance sheets, increased share prices, strong valuations, and substantial dividend distributions.

- **Entrenched multi-tier corruption within Ukraine's postwar reconstruction process**: Stable post-war markets and political systems facilitate Ukraine's securing of private financing for post-war reconstruction by providing an atmosphere conducive to regulatory reform implementation. The government's expanded capacity (predicated upon the stabilized investment atmosphere) to improve private real estate market efficiency and provide a fertile investment environment increases Eurozone banks' profitability from financing and loan disbursements over time.
- **Black Swan Event**: Under Article 7 of the Treaty on European Union, the European Council suspends the voting rights of Hungary and Poland
  Event Particulars: The market presented an initial downward response to the suspension of Hungary's voting rights. Investors anticipating entrenched, internal EU instability demonstrated a decrease in confidence. Eurozone bank share prices dropped as investors determined the voting rights suspension's impact on the Stability and Growth Pact debate. Immediately following the voting rights suspension, Orban signaled the beginning of Hungary's incremental orientation towards Russia. Finally, Eurozone banks reconsidered their exposure to Hungary's public and private sectors as endogenous political fragmentation destabilized European credit markets (Hungary's bond yields should rise in reaction to the voting rights suspension event, indicating that the medium-term risk is sovereign debt default).

Implications for Scenario 2: New Species of Combative Multipolarity

- **The expanded conception of European strategic autonomy**: A protracted war and subsequent Russian occupation of eastern Ukraine accelerates the timeline of aggregate EU defense expenditures meeting NATO's 2% of GDP threshold. European strategic autonomy in defense is paramount for continental stability. Still, the failure of EU policymakers to expand the conception of strategic autonomy to include geoeconomic considerations invites instability.
- **The domestic political corollaries of Russian sanctions**: There is a developing linkage between Russian sanctions and domestic political instability. Western electorates demonstrate a threshold for sanctions that directly impact personal finances. Russian sanctions contribute to rising global commodity prices and exacerbate upward inflationary pressures. How European national governments balance the necessity of sanctions against social unrest and the fiscal strain precipitated by the energy crisis will determine the degree and nature of the risk to Eurozone banks.
- **Black Swan Event**: Cascading Sovereign debt defaults across emerging economies
  Event Particulars: A diverse, cross-sectoral assemblage of disturbances has converged on emerging markets. Rising energy and commodity prices have precipitated domestic upheaval while a meandering debt crisis contracted global economic growth. A series of sovereign debt defaults compounded the impacts of inflation, high commodity prices, and geopolitical instability for Eurozone banks with significant exposures to emerging markets. Instability increased across the emerging-market landscape while Eurozone banks' share prices decreased.

Implications for Scenario 3: Entrenched Global Fragmentation

- **Stability and Growth Pact fails to reach an outcome regarding fiscal guidance for national governments**: The EU's agreement regarding national governments' spending parameters represents an essential function that ultimately establishes and codifies the Union's budgetary discipline. The EU postponed the SGP at the advent of the pandemic and again following the

Russian invasion of Ukraine. More broadly, the risk for Eurozone banks and the EU is the probability of sovereign debt defaults increasing as national governments' debt-to-GDP ratios rise in response to the war and refugee crisis. The suspension of the SGP damages cohesion within the EU, particularly between northern and southern national governments. Political fragmentation within the EU depresses Eurozone bank valuations.

- **Extent of the refugee crisis**: A prolonged war precipitates unsustainable displacements within the EU. The fiscal and political repercussions include social unrest and increases in aggregate debt-to-GDP ratios. Increases in refugee numbers embolden populist leaders and support the electoral ambitions of far-right parties. The extent of fiscal damage to national economies largely depends upon the EU extending funding quickly and consistently to national governments.
- **Black Swan Event**: EU exit campaigns
  Event Particulars: The refugee crisis, exacerbated by the failure and suspension of the SGP, has caused Hungary to threaten the pursuit of an EU exit campaign. Hungary has employed the threat of exiting the EU and entering Russia's sphere as leverage to unfreeze EU funding and amened Article 7's rule of law provisions. The markets responded negatively to the exit campaign's reports, and Eurozone banks' share prices have decreased.

  Regarding historical EU withdrawal outcome patterns, the Brexit campaign, referendum outcome, and the aftermath of the UK's exit from the Union destabilized European markets, introduced significant political uncertainty into the Eurozone banking sector, and precipitated price declines across European equities. Following the referendum's announcement, the sterling dropped to its lowest point in 31 years, and the FTSE 100 "fell from 6338.10 to 5806.13 in the first ten minutes of trading."[15] Finally, the STOXX Europe 600 index declined by 7 percent to 321.9 (the most significant decline since the 2008 financial crisis), and the FTSEurofirst 300 dropped 6.6 percent.[16]

Implications for Scenario 4: Aggressive Bifurcation

- **Deglobalization**: The fragmentation caused by fully-realized deglobalization contracts global GDP growth and creates downward pressure on Eurozone banks' share prices. The new species of deglobalization "is being driven by powerful autocrats with territorial ambitions and domestic populists who are hostile to global institutions and connections of any sort."[17] The protectionist policies pursued by populist parties and autocrats threaten food security and damage diplomatic relationships between great powers and emerging markets. The degree autocracies succeed in placating their domestic populations will determine the viability of their coercive diplomacy.
- **The expansion of aggressive geoeconomic policies**: The bifurcation between the West and Russia-China creates spheres of economic influence, while fractures within the Western alliance system contribute to commodity price volatility. Subsequent geopolitical destabilization coupled with resource scarcity introduces aggressive geoeconomic activity where states pursue

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[15] Brexit and the banking sector: https://www.researchgate.net/publication/349990042_Brexit_and_the_Banking_Sector_The_Stock_Market_Reaction_of_UK_and_European_Banks

[16] Reuters, "Banks Plunge": https://www.reuters.com/article/europe-stocks/banks-plunge-as-brexit-vote-sends-european-shares-reeling-idINKCN0ZA33F

[17] Alden, "Anti-globalization": https://foreignpolicy.com/2022/05/03/globalization-deglobalization-inflation-economy-trade-borders/

increasingly aggressive economic and geopolitical instruments (including natural resource extraction) as leverage against the demands of a rules-based international order.[18]

- **Black Swan Event**: Gray-zone miscalculation or deliberate attack by China
  Event Particulars: China attacked Western forces in the South China Sea through miscalculation or a calculated strategic maneuver. Russia supported China, while the Western alliance organized against further belligerence. In the following days, global markets contracted, and the location of the attack disrupted international trade routes. US and EU policymakers express concerns regarding a war with China. The EU implemented liquidity requirements for Eurozone banks, which limited dividend payouts and share buybacks while creating downward pressure on share prices. Because of the threat of war with China and a possible East-West decoupling, investors have questioned the medium-term profitability of Eurozone banks amidst the splintering of global financial markets.

Chapter Five: Forward-Looking Recommendations

The presented scenarios consider a broad spectrum of variables that will likely impact institutional investment allocations to Eurozone banks, including, *inter alia*, geopolitical shifts, security developments, EU fiscal policy decisions, domestic political outcomes, and the viability of the rules-based international order.

The analysis provides a simulated environment to stress test an investment strategy predicated on allocations to Eurozone banks. Each scenario's corresponding implications propose possible associated risks and map the surrounding procedural and geopolitical environment. The recommendations synthesize the mapped scenario implication findings and order each scenario's conclusions against the multifaceted volatility of global markets. Two foundational questions organize the practical examination of the scenarios and corresponding implications:

1. Does the operative investment strategy (increased allocations to Eurozone banks) possess the fundamental capabilities to perform in each of the four presented plausible futures?
2. How may the operative investment strategy express resilience, respond to shifting futures, evolve to mitigate risk, and convert contingencies into durable opportunities?

Recommendation One: Understanding the Salience of Bond Yields and Eurozone Banks' Exposure

Recommendation Two: Confronting Deglobalization

Recommendation Three: Broadened Conception of Strategic Autonomy

Recommendation Four: Food Security and Global Markets

[18] Employing "geoeconomics" within the context of Scenario 4 feasibly allows the scenario to anticipate the potential great power coercion (hard and soft power) and competition (hot and cold conflict) likely surrounding the future pursuit of novel, aggressive economic and geopolitical instruments (including natural resource extraction and bargaining within emerging economies).

Figure 3: Recommendations

Forward-Looking Recommendations

Recommendation One

Understand the Salience of Bond Yields and Eurozone Banks' Exposure

Country-specific bond indices "are closely watched indicators for perceived country risk or default risk in emerging markets."[19] The war in Ukraine and the uncertainties surrounding its duration and outcome increased bond yields substantially across emerging markets. The twinning pressures of unsustainable debt service requirements (exacerbated by central banks' interest rate hikes) and rising bond yields create default risk across a broad swath of emerging markets.

Emerging market yield spreads have increased against the US Treasury bonds, indicating systemic instability. Yield spreads represent "the most widely accepted measure of political risk,"[20] Hungary's increased yield spread suggests destabilization within the national government. Hungary's national election (won by Orban) on April 3, 2022, the EU's decision to invoke Article 7's conditionality mechanism (the provision tethers national governments' rule of law behavior to EU funding) against Hungary, and Ursula von der Leyen's subsequent conditionality announcement on April 5, 2022, provide a practical demonstration of bond yields measuring both default risk and political instability over time. This confluence of events impacts bond yields and suggests future risks for Eurozone banks highly exposed to Hungary.

Hungary is a proxy, demonstrating the direct relationship between bond yields (and their spreads against US Treasury bonds) and political risk. The investment strategy of increased allocations to eurozone banks should consistently integrate bond yield data into its tactical decision-making. Specifically, as emerging markets attempt to balance debt service requirements and rising commodity prices, future strategic decisions should consider the linkages between political developments, global security events, and bond yield increases. The strategic risk is that Eurozone banks fail to sufficiently calibrate their risk exposure to emerging market economies. Understanding bond yield behavior and the tethered external determinants will allow the investment strategy to evolve while avoiding potential defaults, increasing valuations, strengthening balance sheets, and buttressing share prices.

Recommendation Two

Confront Deglobalization

Investment strategies should consider the aggregate impact of deglobalization on global markets. As international trade contracts and states impose protectionist tariffs, Eurozone banks' valuations will depend, to a degree, upon the inflationary pressures precipitated by diminished cohesion across sectors. Accordingly, strategies should evolve to accommodate central bank interest-rate increases in response to rising inflation while understanding how national governments' subsidizing of chosen industries (semiconductor and green transition targets) may impact future lending environments.

Export controls and flagrant aggression within the WTO suggest a broader, more entrenched suite of risks for Eurozone banks that investment strategies must balance. Unfettered conflict between large

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[19] German Economic Association, "The Impact of Political Risk on Sovereign Bond Spreads": https://www.econstor.eu/bitstream/10419/19887/1/Moser_revised.pdf

[20] Bloomberg, Sovereign Yield Changes in Emerging Markets: https://www.bloomberg.com/news/features/2022-04-20/rising-food-energy-prices-are-just-the-start-of-an-emerging-economic-crisis

economies may diminish investor confidence and ultimately depress shares, but the broader risk is a more fundamental sundering of great power relations. Investment strategies should prepare for a weakening of the rules-based international order as states contract and employ aggressive geoeconomic tactics to coerce rivals through natural resource administration. Strategies pursuing overweight allocations to Eurozone banks should prepare for a foundational destabilization of global markets and geopolitics, which may reconfigure banks' exposure to emerging market economies. The strategy may limit risk by ensuring that the sector balances its exposure to national governments with high political fragmentation and increased default risk.

Recommendation Three

Broadened Conception of Strategic Autonomy

In a cohesive macroeconomic and geopolitical environment driven by the EU's more expansive conception of strategic autonomy, investment strategies should pursue corresponding advantages. Moreover, the EU's broadened definition of strategic autonomy may present a spectrum of lending opportunities as the Union aggressively facilitates the green transition through innovation incentives directed at private firms.

The overall stability provided by a multifaceted conception of strategic autonomy supports increasing share prices. Aggressive investment strategies, which broadly increase allocations to the banking sector, succeed as a prolonged period of stabilized geopolitics buoys global markets. The prioritization of implementing strategic autonomy across policy areas should engender an SGP resolution and define the spending parameters of national governments. Strategies should focus on increasing allocations across the banking sector and anticipating the opportunities presented by predictable regulatory environments underpinned by a functioning SGP.

A fully realized expression of strategic autonomy will dynamize EU cohesion surrounding Ukraine's reconstruction. Eurozone banks may enter public-private partnerships to finance reconstruction efforts in Ukraine. Investment strategies should pursue the opportunities inherent to financing reconstruction efforts while monitoring the regulation of Ukraine's private markets to ensure the absence of corruption.

Recommendation Four

Food Security and Global Markets

Investment strategies should consider the degree of bank exposure to emerging markets and understand the impact of the global food crisis on political stability. Ukraine and Russia "supply 28% of globally traded wheat, 29% of the barley, 15% of maize and 75% of the sunflower oil."[21] Mined Ukrainian waters off its southern coast and the Russian blockade of the port of Odesa impede the distribution of commodities.

The disruption in supply precipitates political unrest in developing countries and represents a consistent risk to Eurozone bank profitability. Strategies must consider the duration of the blockade and the broad political impact of food shortages when determining investment allocations. For emerging markets, food security issues will compound the current extremities of unsustainable debt service requirements and rising energy prices. In addition, investment strategies should prepare for increased bank exposure to emergent political instability. A destabilized political environment across emerging markets will introduce precarity into regulatory environments, jeopardizing the balance sheets of exposed

[21] The Economist, May 2022.

banks. Strategies must monitor the legislative and judicial atmosphere and anticipate future shocks that may damage banks' asset quality.

Stringent export controls may increase geopolitical and diplomatic tension. Investment strategies should prepare for regional instability and trade disputes between great powers (driven by protectionist positions). Strategies should recognize aggressive geoeconomic tactics and understand how natural resource administration may impact commodity markets. Finally, strategies must prepare for the expansion of Western sanctions against Russia and the impact of increased coercive pressure on food distribution and global markets.

Chapter One: Investment Strategy Proposal

Allocation to Eurozone Banks

The Eurozone banking sector remains overweight and attractive in the long term. Following Russia's invasion of Ukraine, increased exposure to Eurozone banks captures the inherent advantages of underlying market volatility and fortuitous regulatory developments. Moreover, as the US and Germany expand heavy arms exports to Ukraine, Eurozone bank exposure provides positions capable of absorbing incremental, stabilizing macroeconomic shifts. The reasoning for increasing exposure:

Industry Attractiveness: In 2021, the Eurozone banking sector was "the top-performing sector in the Eurozone, with a return of 42%, compared to the broad index at 23%".[22]

Sector Performance: Before the Russian invasion, in January 2022, the European banking sector was top-performing in the Stoxx Europe 600 index (up 10%).

Central Bank Policy: On April 21, 2022, Jerome Powell indicated that the Federal Reserve would likely implement half-point interest-rate increases to mitigate inflationary pressures. The European Central Bank (ECB) also suggested the possibility of a rate increase in July 2022 (the deposit rate may increase from -.5% to zero).[23] Interest-rate hikes will increase bank profits, while pandemic-related economic recovery will encourage cross-sector borrowing.

Bond Yield Increases: The aggregate increase in bond yields will allow Eurozone banks to increase lending profitability, as "every 100-basis-point increase in yields could add about 23 billion euros to bank earnings."[24]

Palatable Exposure: Recent disclosures indicate that Eurozone banks will weather their direct loan exposures to Russia and Ukraine (the threat of the exposure is not existential).

Low Aggregate Valuations: Valuations remain low. Goldman Sachs 2022 outlook "expects Eurozone banks' price-to-book ratio of 0.67 to increase to 0.78, converging toward the historical relationship between price to book and return on equity".[25] Eurozone banks' low P/B ratios and higher equity returns indicate that the market undervalues European bank stocks.

The Lifting of the ECB's Dividend Recommendation: In March 2020 (at the advent of the pandemic), the ECB "recommended that euro area banks do not pay dividends or buy back shares until at least October 2020."[26] The ECB renewed the recommendation in July and December 2020 and rescinded the recommendation in September 2021. The recommendation "aimed to conserve the capital position of

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[22] Goldman Sachs 2022 Outlook: https://resources.goldman.com/content/dam/pwm/direct-links/us/en/PDF/2022_isg_outlook.pdf?sa=n&rd=n
[23] Bloomberg April 21, 2022: https://www.bloomberg.com/news/articles/2022-04-20/ecb-could-hike-interest-rates-as-soon-as-july-kazaks-says
[24] Bloomberg January 2022: https://www.bloomberg.com/news/articles/2022-01-16/disappointing-decade-for-european-bank-stocks-gives-way-to-rally
[25] Goldman Sachs 2022 Outlook: https://resources.goldman.com/content/dam/pwm/direct-links/us/en/PDF/2022_isg_outlook.pdf?sa=n&rd=n
[26] ECB Evaluation 2022: https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202106_3~88f86aa6f1.en.html

euro area banks, boosting their resilience and ability to provide funding to households and firms."[27] In 2022, Eurozone banks demonstrate adequate capital ratio projections, suggesting increased share buybacks and dividend distributions.

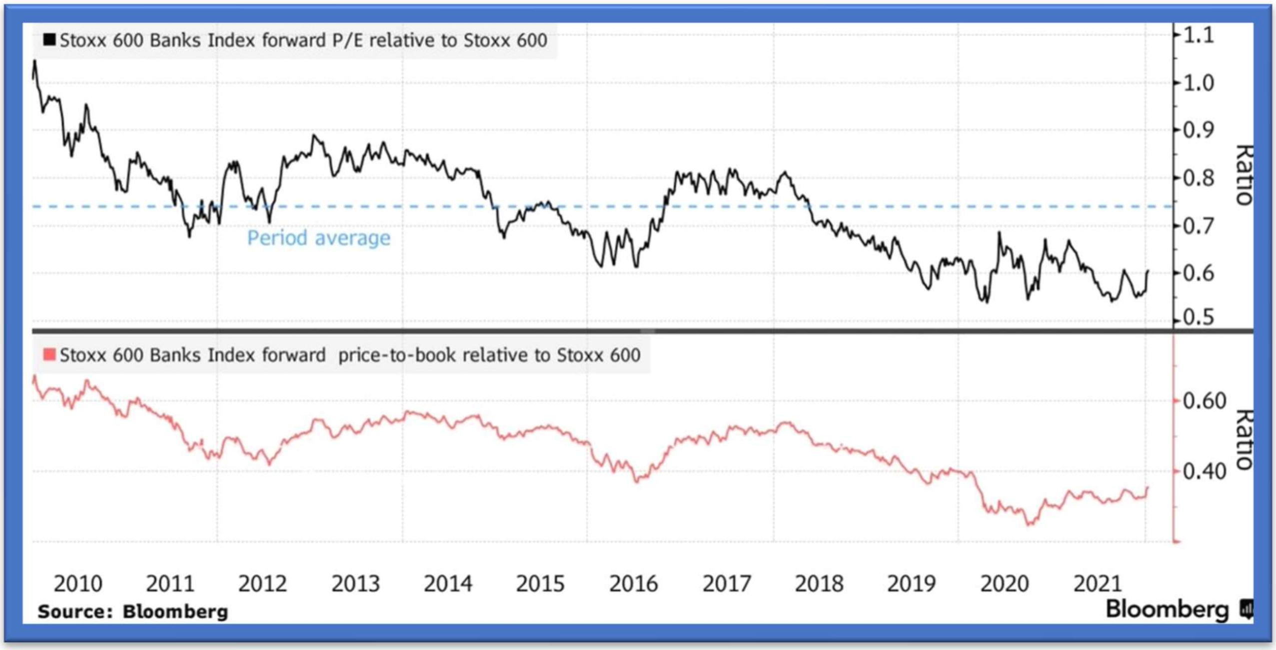

Figure 4: Low Relative Valuations

An ECB analysis determined that the dividend distribution recommendation produced "a negative impact on bank valuations in the order of magnitude of 7%."[28] Further, the analysis indicated that the precarity surrounding future dividend distribution precipitated downward pressure on bank valuations rather than dividend constraints acting as the primary catalyst.[29] The findings suggest that the ECB's rescission of the dividend recommendation and increased stock buybacks will engender investor confidence concerning Eurozone banks' market performance.

[27] Ibid.
[28] ECB Recommendation Analysis 2022: https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202106_3~88f86aa6f1.en.html
[29] Ibid. "Euro area bank shares declined significantly after publication of the ECB recommendation in late March while decoupling from the share prices of Swiss peers and non-financial corporates.": ECB Recommendation Analysis 2022.

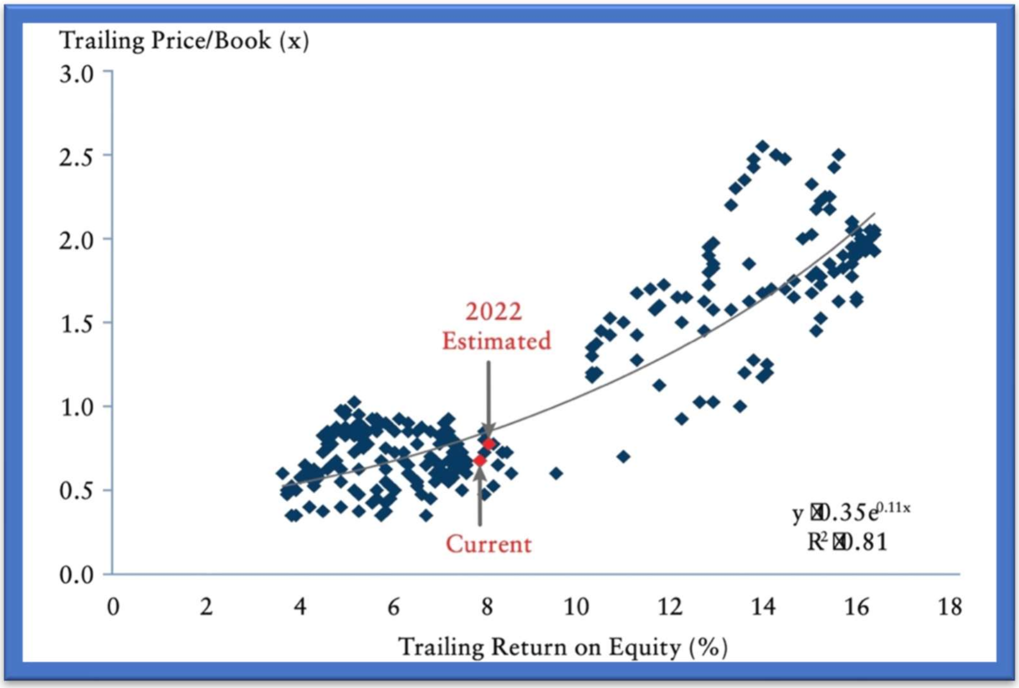

Figure 5: Price-to-book Ratios Against Return on Equity

Increased Merger Activity: Eurozone banks possess surplus capital, encouraging expanded merger activity, and may "act as a catalyst for the long-debated consolidation of the fragmented European banking market."[30] Following the sale of its US banking arm, BNP Paribas SA has $16 billion available for mergers.

[30] [30] Bloomberg January 2022: https://www.bloomberg.com/news/articles/2022-01-16/disappointing-decade-for-european-bank-stocks-gives-way-to-rally

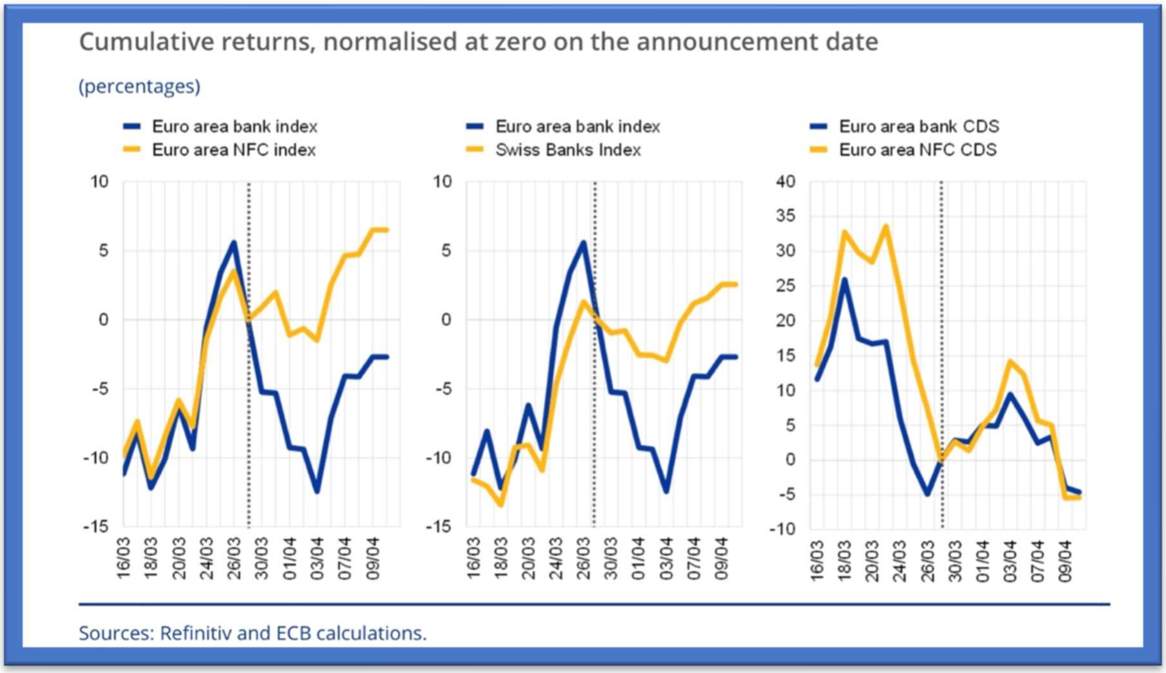

Figure 6: Bank Share Prices Against Non-Financial Corporates (NFCs)

Box 1: Proxy Mechanism

The scenario analysis employs BNP Paribas SA as a proxy investment vehicle.

Consolidated Investment Analysis

BNP Paribas SA
Price/Book: .52
Return on Equity: 7.22%
Price Target: 78 Euros[31]

Exposure to Ukraine and Russia: 1.7 billion Euros (.09% of BNP's total commitments) and 1.3 billion Euros (.07% of BNP's total commitments) represent BNP's limited gross exposure to Ukraine and Russia, respectively. Further, due to BNP's operational strategy in these markets, buttressed by collateral and guarantees, the net exposure to Russia and Ukraine is 500 million Euros.[32]

[31] Morgan Stanley Research: https://acrobat.adobe.com/link/track?uri=urn:aaid:scds:US:413b9b48-7796-335b-a383-12c99632d3c7

[32] BNP Paribas Agenda Update 2022: https://invest.bnpparibas/en/groupe-de-document/update-regarding-the-agenda-of-the-investor-day

Uncertainties:

- Macroeconomic environment[33]
- Market volatility
- Evolving exposure to Russia and Ukraine
- Central bank policy
- Adverse security developments (expansion of the war into Eastern Europe and the Baltics)

STOXX Europe 600 Banks Index Overview

Price/Book: .67
Return on Equity: ~8%

Exposure to Ukraine and Russia: The Banks Index has limited aggregate exposure to Ukraine and Russia due to operational shifts following the Russian invasion of Crimea. Institutional credit ratings are likely not in jeopardy, as rating agencies observe the "modest materiality in terms of the groups' total exposure and the ample local deposit funding of the subsidiaries, which historically has held up well in previous times of stress."[34]

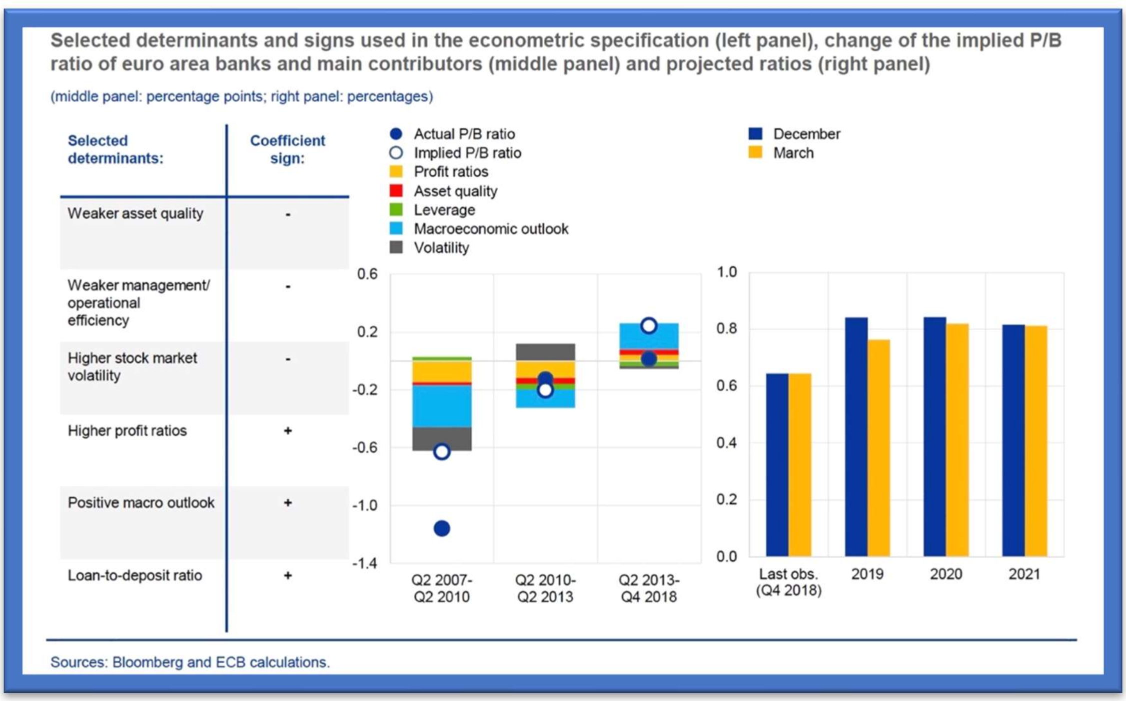

Figure 7: Importance of Economic Determinants on Eurozone Banks

[33] Macroeconomic determinants have a significant impact on Eurozone bank valuations, particularly P/B ratios: https://www.ecb.europa.eu/pub/financial-stability/fsr/focus/2019/pdf/ecb~a18359e8d9.fsrbox201905_05.pdf
[34] S&P Global, Credit FAQ: https://www.spglobal.com/ratings/en/research/articles/220323-credit-faq-how-the-russia-ukraine-conflict-is-affecting-ratings-and-the-global-economy-12318589

Summary

First, BNP’s p/b ratio and return on equity data align with Goldman’s 2022 STOXX Europe 600 Banks Index projections and suggest that the market undervalues bank stocks. Secondly, limited combined exposures to Ukraine and Russia should facilitate long-term sector resilience.

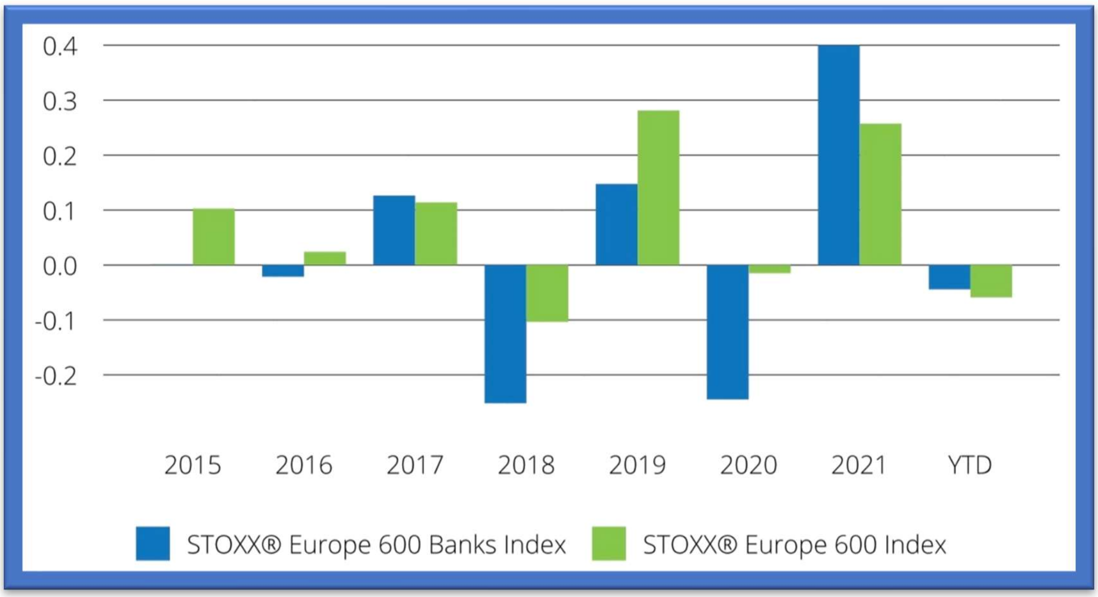

Figure 8: STOXX Europe 600 Bank Index Returns Against STOXX Europe 600 Index

Finally, in 2021, the Eurozone banking sector was the top-performing group within the STOXX 600 Index. A stabilized macroeconomic environment may allow banks to recapture 2021’s performance by building upon 2022’s underlying advantages (cheap valuations, central bank policy, and the ECB’s rescission of its dividend recommendation).

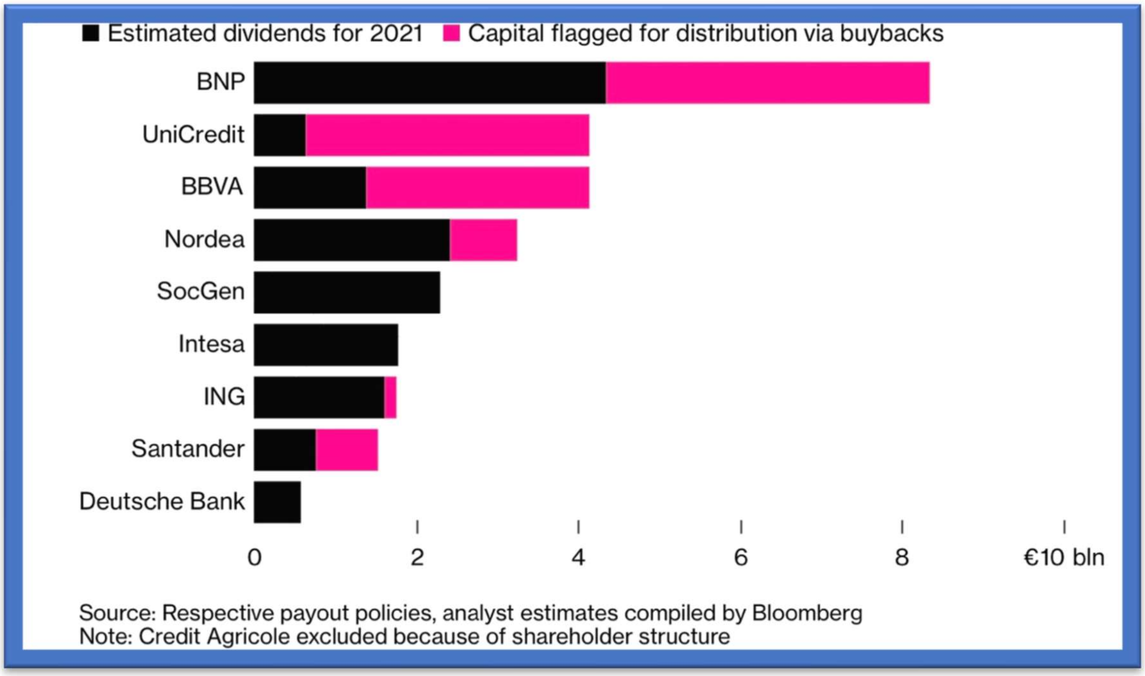

Figure 9: Increased Buy Backs

Chapter Two: Investment Outlook Variables

Foreign Policy & International Relations Considerations

Defense Expenditure and Budgetary Provisions: Aggregate Western defense expenditures and specific budgetary provisions inform defense industry forecasts, contribute to practical European stability, and support an indefinite US contestation policy. In 2020, aggregate EU defense expenditure was 1.5% of GDP.[35] Furthermore, on February 27, 2022, Chancellor Olaf Scholz announced Germany's (a modern standard of conservative military expenditures) commitment to increasing national defense expenditures above NATO's 2% of GDP threshold (Germany's 2020 expenditure was 1.4% of GDP).[36]

[35] Reuters February 2022: https://www.reuters.com/business/aerospace-defense/germany-hike-defense-spending-scholz-says-further-policy-shift-2022-02-27/
[36] Ibid.

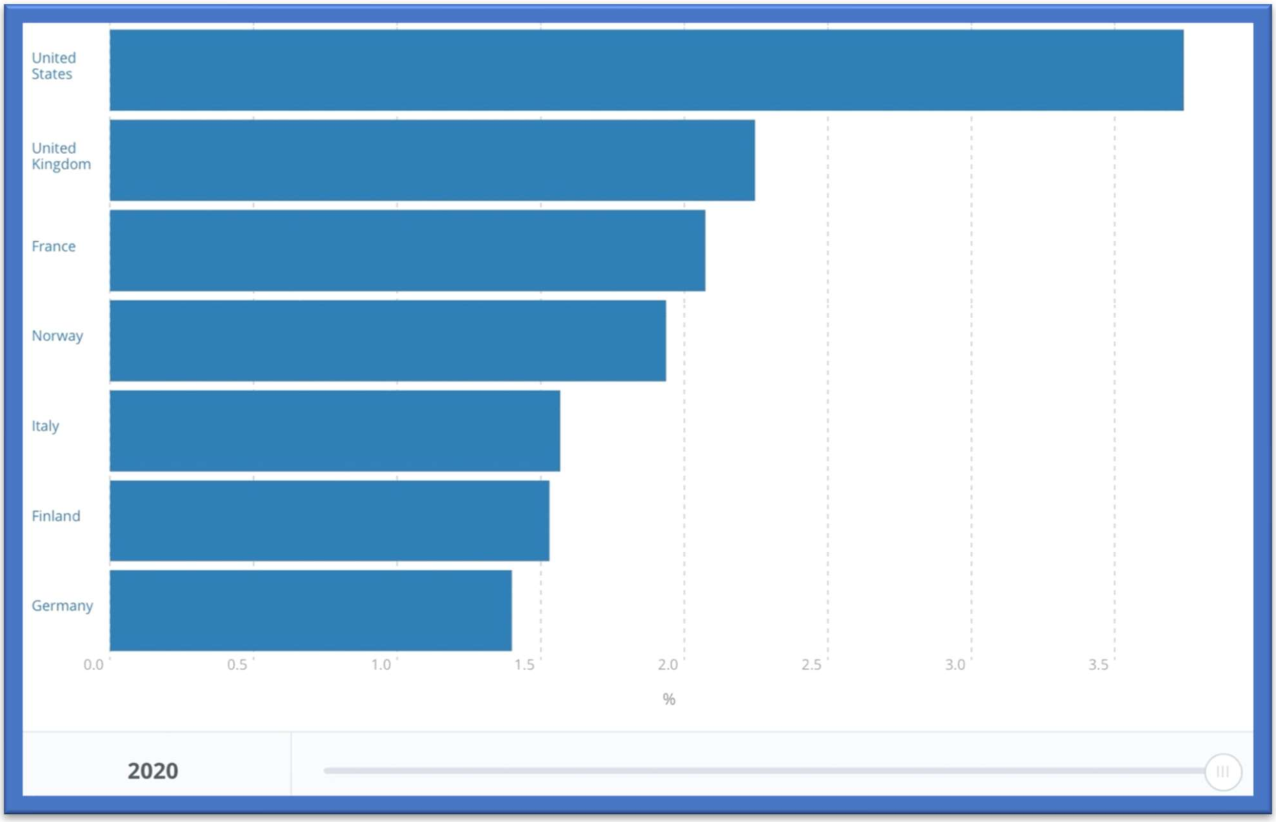

Figure 10: EU Defense Expenditures as % of GDP

While the Biden administration's $773 billion defense budget request for FY 2023 represents a 4% increase from the administration's FY 2022 budget request, the procurement number (the amount allotted to purchase defense contractor products) remains relatively static.[37] Additionally, the spending growth forecast through 2027 indicates a constrained pace compared to previous budgets.[38]

Western Sanctions: The composition of Western sanctions and the fluctuating extent to which these sanctions comprehensively target Russian oil exports continue to impact global economic systems. The EU has stated that its target date for fully realized energy independence is 2030. The possible contraction of this timeline has security and geopolitical implications for Western allies.

In early April 2022, Janet Yellen addressed countries refraining from implementing Russian sanctions. Yellen warned states against "backfilling the void left by others."[39] Her remarks specifically implicated China, as she questioned the West's willingness to countenance further economic integration with China should China continue to support Russian belligerence. The course of sanctions and the breadth of sovereign participation in their implementation determine, to a degree, the viability of the incumbent international order and global economic integration.

[37] DOD FY 2023 Budget: https://www.defense.gov/News/Releases/Tag/220197/fy23-budget/
[38] Barron's 2022: https://www.barrons.com/articles/biden-proposal-defense-stocks-lockheed-51648570520
[39] Reuters April 2022: https://www.reuters.com/world/us-allies-will-not-be-indifferent-those-who-undermine-russia-sanctions-yellen-2022-04-13/

The Resilience of Multilateral Institutions: Fragmentation threatens the viability of multilateral institutions.

Procedural:

1. Russia and China's veto power limits the practical effectiveness of the Security Council
2. Joint consolidation of P-5 members' powers within The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

Material:

1. Increased domestic political instability stresses Western coalitions
2. Chinese development banks continued power expansion[40]

Taiwan Developments: Precarious cross-strait relations represent a primary driver of regional instability. China consistently sends J-16 and J-10 warplanes into Taiwan's airspace, and, in response to Russia's invasion, President Tsai raised the alert level of Taiwan's military in February 2022.[41] However, it remains unclear how China will ultimately incorporate the Russia-Ukraine war into its strategic calculus.

Macroeconomic Considerations

Emerging Economies: Emerging economies observe increased inflation "driven primarily by higher commodity prices, supply chain disruptions, labor shortages, and a surge in demand for goods."[42] Additionally, in a swath of emerging markets, the government debt to GDP ratio increased by 10 percent, increasing the probability of subsequent sovereign debt defaults.[43]

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[40] "With more than $66 billion in total capital provided, China has eclipsed Japan to become the second-largest contributor to the system of development banks that provide subsidized loans to poor countries, mostly for infrastructure." CGD: https://www.cgdev.org/article/report-reveals-new-data-chinas-growing-power-influence-76-global-institutions

[41] Reuters February 23, 2022: https://www.reuters.com/world/asia-pacific/taiwan-says-must-raise-alertness-over-ukraine-crisis-2022-02-23/

[42] Deloitte February 2022: https://www2.deloitte.com/us/en/insights/economy/emerging-markets-outlook.html

[43] Ibid.

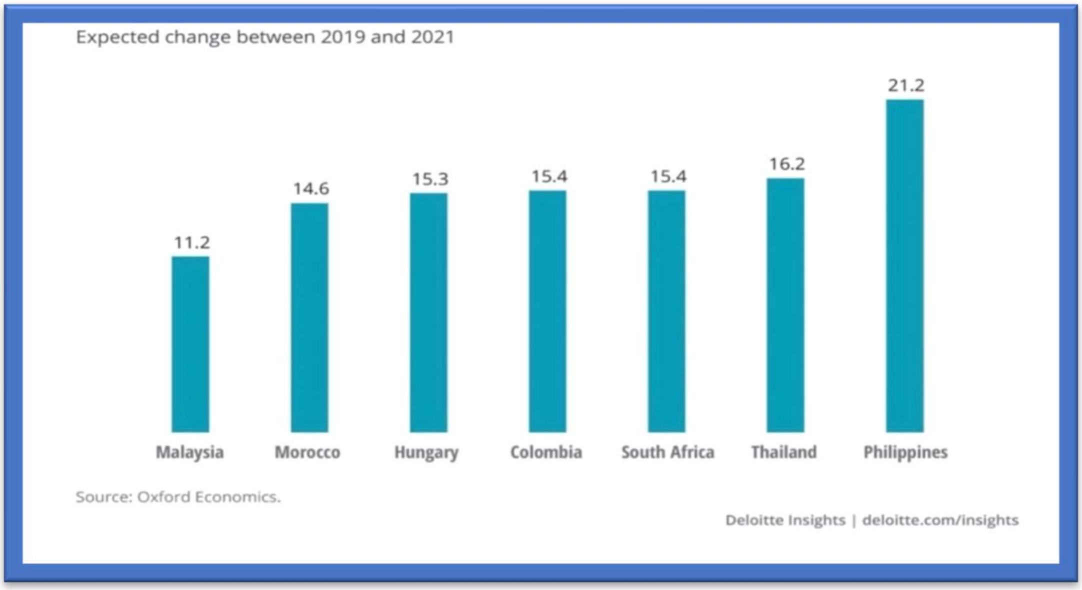

Figure 11: Government Debt to GDP Ratio in Emerging Markets

Trade: International trade underperforms in the wake of the Russian invasion. The United Nations (UN) estimates that "World merchandise trade volume is expected to grow just 3 percent this year, down from the previous forecast of 4.7 percent, and 3.4 percent in 2023".[44] Additionally, port congestion limits shipping functionality and impedes supply chain recovery.

Supply Chain: The war diminishes global supply chain functionality. Europe's overdependence on Russian crude oil and natural gas tempers the effectiveness of Western sanctions. Further, Europe's reliance on Ukrainian and Russian agricultural commodities and fertilizer products impedes global food distribution and likely alters crop yield projections.[45] Russia buttresses global caloric commodity markets, which complicates near and medium-term recovery.[46]

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[44] UN April 2022: https://news.un.org/en/story/2022/04/1116052
[45] Deloitte March 2022: https://www2.deloitte.com/us/en/insights/focus/supply-chain/supply-chain-war-russia-ukraine.html
[46] A recent Deloitte report states that "The principal reason that Russia plays above its weight is that it is a major exporter of some of the world's most important commodities."

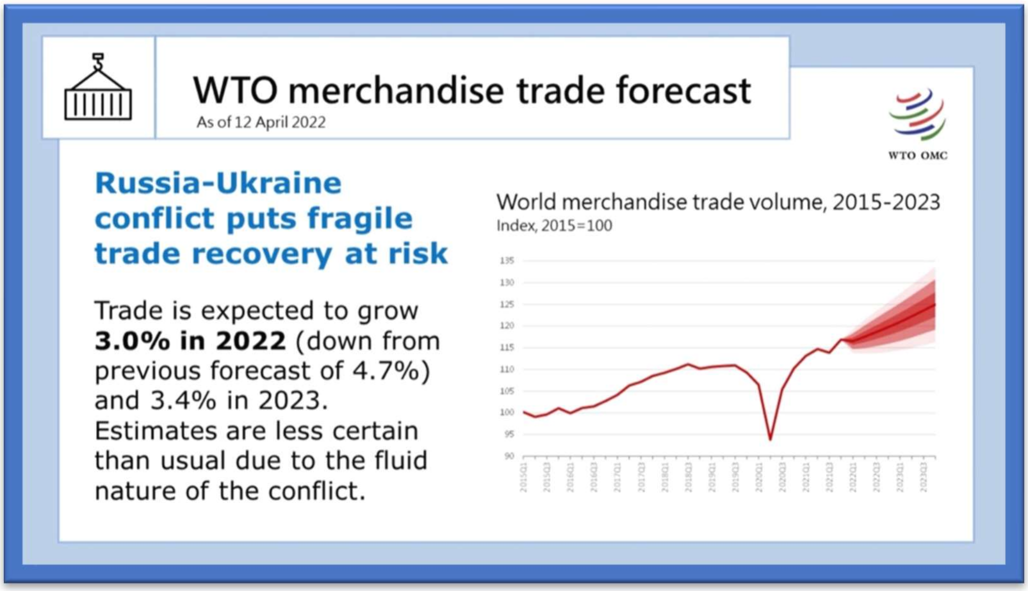

Figure 12: WTO Trade Forecast

Central Bank Policy: Central banks explore policies designed to temper inflation. On April 21, 2022, Federal Reserve Chair Jerome Powell suggested imminent half-point interest-rate increases to address inflationary pressure. The European Central Bank also indicated interest-rate increases scheduled for July 2022.[47]

Global Credit Markets: Bond yields increase across Europe, predicting political instability. Eurozone banks with significant exposure to Russia pursue damage mitigation strategies. Cross-regional emerging economy defaults threaten the global economy as national governments contend with the twinning crises of unsustainable debt service requirements (primarily precipitated by the pandemic and rising interest rates) and the war in Ukraine's impact on energy and food prices.

[47] Bloomberg April 21, 2022: https://www.bloomberg.com/news/articles/2022-04-20/ecb-could-hike-interest-rates-as-soon-as-july-kazaks-says

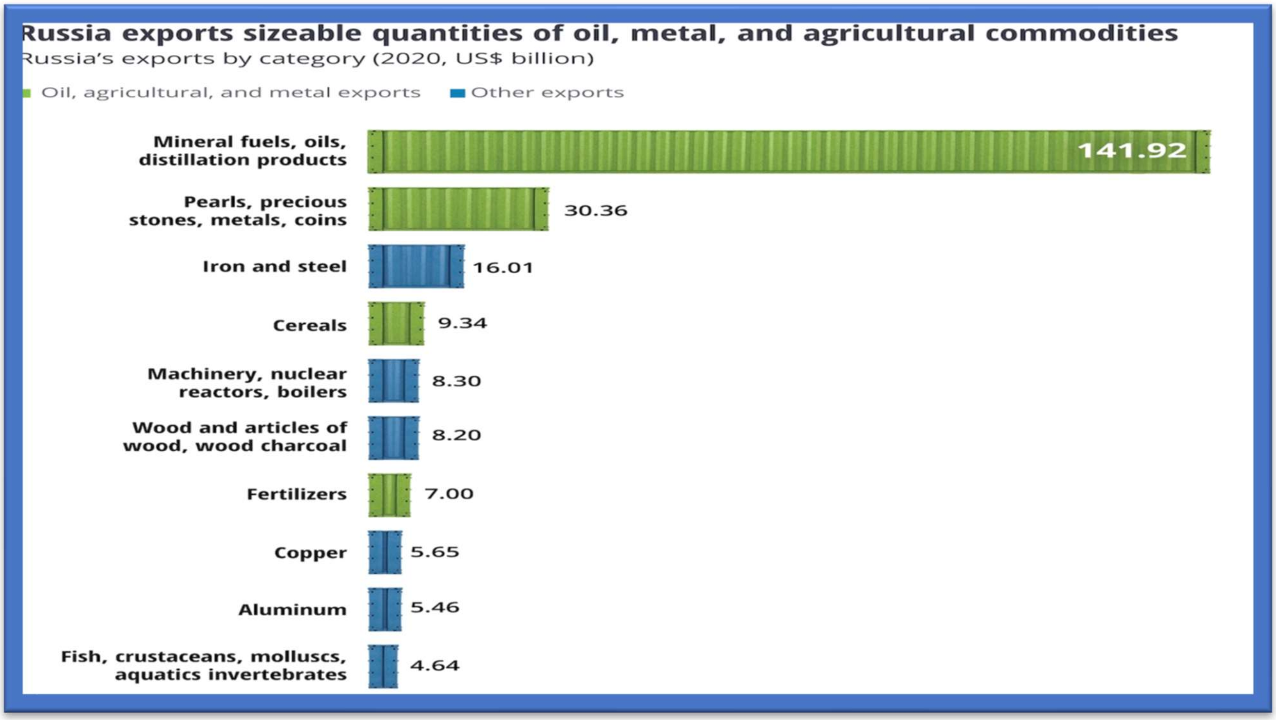

Figure 13: Russia's Commodity Influence"

Sub-Saharan Africa: Successive coups, fraudulent elections, and unconstitutional change of government events continue to threaten the stability of national governments. Food shortages and rising energy prices contribute to increased political instability. Deficient security policies endanger the functionality of national economies and jeopardize investment in the extractive sector. The proliferation of anocratic regimes increases the probability of civil war and subsequent regional spillover.[48]

European Strategic Autonomy: The EU fails to codify a more expansive conception of strategic autonomy (a more independent Europe) that includes defense, economic, energy sourcing, and social considerations. The broad historical spectrum of security issues consistently evolves and encompasses hard and soft power expressions. The argument to expand the conception of strategic autonomy has "largely been driven by the EU's External Action Service (EEAS) and also reflects the systemic challenge posed by political and economic competition with countries such as China or Russia, who make use of all levers of power (beyond military instruments) to compete below the threshold of open armed conflict."[49]

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[48] Anocracy, briefly defined, is a regime that expresses, at once, features of democratic and autocratic governance.
[49] Rand, "European Strategic Autonomy in Defense," 2021.

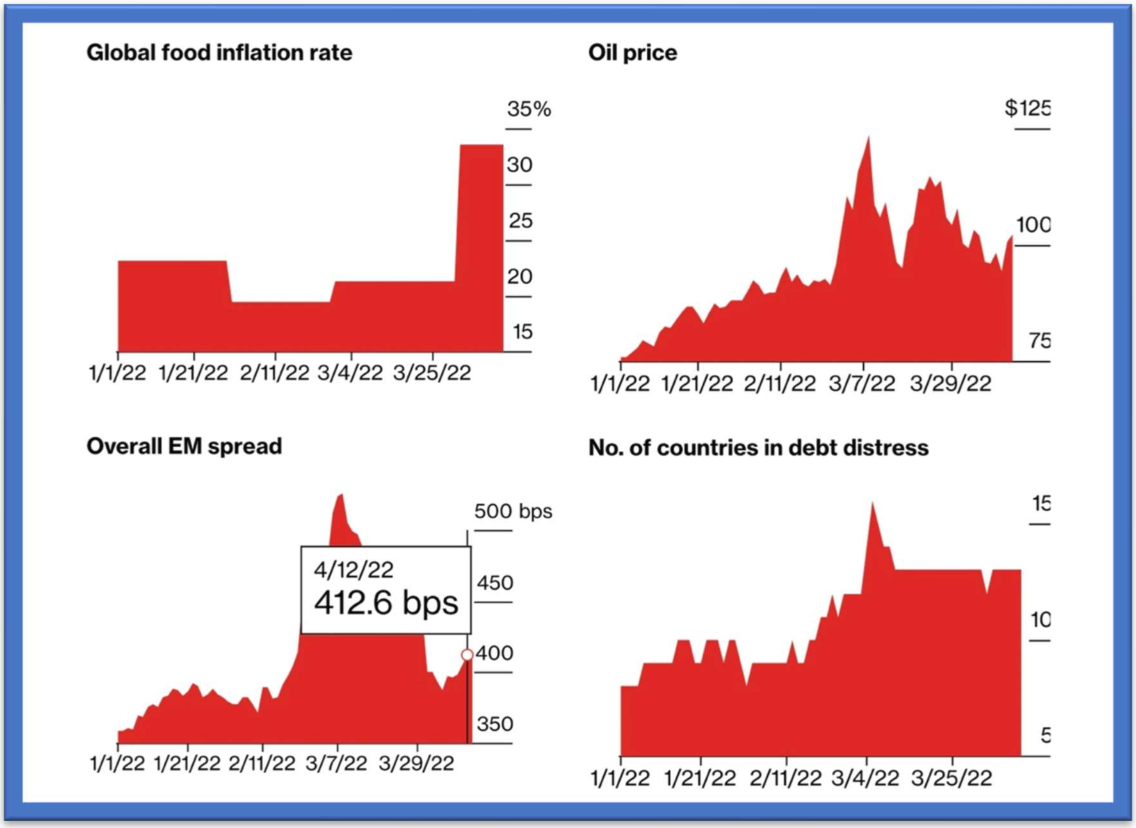

Figure 14: Emerging Markets Risks

Chapter Three: Scenarios

Introduction

Following a brief explanatory section describing the necessary inclusion of Russia-Ukraine war outcome scenarios, Chapter Four presents four scenarios, mapped outward to 2027, that consider the potential properties of global macroeconomic, geopolitical, and security habitats following Russia's war in Ukraine.

War Outcome Scenarios

Binary Scenario Pairings

Building implication scenarios around the potential elements of 2027's geopolitical, macroeconomic, and security habitats following the Russia-Ukraine war required constructing a set of war scenarios that map the possible war outcomes and link the relational implication scenarios to the generative war scenarios through binary pairings.

Each war scenario provides foundational atmospheric conditions within which the corresponding implication scenario expands. Finally, each underlying war scenario augments the proceeding implication scenario by introducing possible contextual parameters unique to the four war-outcome scenario pairings.

Figure 15: War-outcome Scenario Pairings

Scenarios of War in Ukraine[50]

War Scenario 1: Russian Withdrawal
Agreement reached regarding Russian control of Donbas.

War Scenario 2: Stalemate
Ukraine has become a highly archipelagic Russian-occupied state.

War Scenario 3: Highly repressive occupation of archipelagic Ukraine
Ukraine's fragmentary control is primarily limited to western regions coupled with the partial reestablishment of Soviet Union territories.

War Scenario 4: Direct NATO-Russia war
NATO upholds Article V.

Foundational War Scenario Question: What will war outcomes look like in 2022-2023?

War Scenario 1: Russian Withdrawal: Agreement Reached Regarding Russian Control of Donbas, Crimea, and Russian Enclaves

Overview

Ukrainian forces, underpinned by continuous, largely unimpeded Western weapons transfers, have repelled Russian advances north of Kyiv, held the Black Sea line, and retained control of Odesa;

[50] War scenarios were written March 5, 2022

Russian military performance has further deteriorated and required troop withdrawals on multiple fronts; ultimately, an agreement has materialized, providing for Russian control or partial control of the Donbas region (particularly Russian enclaves) and Crimea; further, the agreement included security assurances regarding Ukraine's future admission into NATO (these provisions allowed Putin to claim victory); US sanctions have included Russian oil exports; the collapsed Russian economy, increased internal instability, mounting tactical defeats, and documented evidence of ubiquitous Russian-perpetrated war crimes have compelled Putin to agree to a ceasefire and approach broader negotiations with the West.

Outcome

Putin's relative political strength and the degree of sustained Russian military organization following the withdrawal have determined the provisions of a negotiated peace settlement. While Putin's bargaining capital has remained limited, the West agreed to lift selected sanctions targeting the Russian economy in exchange for troop withdrawal from Ukraine (excluding Russian enclaves). The global economy has sustained damage in the near-term, avoided recession, and recovered in the medium term as markets have stabilized and investor confidence has returned.[51] The West has urgently addressed the refugee crisis, tempering the economic impact on the EU. National economies have mainly been resilient, and the probability of domestic instability spillover has diminished.[52] NATO has expanded to include Sweden and Finland and has agreed to immediate discussions concerning Russian-centric security assurances. The conclusion of the war and the success of subsequent peace talks have engendered a new security architecture in Europe. The EU and NATO have prioritized strategic autonomy and significantly increased aggregate defense spending.

War Scenario 2: Ukraine becomes a highly archipelagic occupied state

Overview

Russia has annexed pockets of southern and eastern Ukraine, encircled Kyiv, and removed Ukrainian statehood; Ukraine has become a precarious state that has operated within the parameters of a stalemate; Russian control has become highly archipelagic, and an active insurgency has controlled parallel regions; Russia has become a fully realized pariah state; Putin has achieved a pyrrhic victory, as Ukrainians have prosecuted a prolonged, impactful insurgency that has fundamentally increased internal precarity and jeopardized Russian control; Zelensky has led the insurgency through a government in western Ukraine or exile; US and NATO allies, through the exile government, have continued to impose economic sanctions, including on Russian oil exports; NATO has continued its weapons transfers to the insurgency largely unimpeded; NATO has deployed more troops to frontline states.

Outcome

Western materiel and intelligence support have allowed the insurgency to consistently disrupt Russian control and exact ever-increasing costs for the occupation. The insurgency and occupation have existed indefinitely in a habitat of unceasing precarity. The occupying forces have been unable to establish themselves fully, and Putin has not realized his organizing objectives. The risk of a Eurozone recession has increased as US sanctions have included Russian oil exports, and energy prices have continued to rise. The West has partially addressed the refugee crisis, death rates have leveled off, and

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[51] The 10-2 Treasury Yield Spread is .23% (as of 3-7-22), which is a historical precursor to recession.
[52] Sovereign bond yields have climbed, and the bond yield spreads for national governments geographically close to Ukraine have risen in recent weeks, which is an early indicator of instability.

Europe has avoided worst-case humanitarian outcomes. However, national economies (and the EU economy broadly) have suffered greatly, and the risk of domestic instability spillover precipitated by the refugee crisis has remained high. Dissent within Russia has increased as the prolonged application of Western sanctions has damaged the economy and isolated Russian citizens from the world. The economic and social upheaval has increased against climbing Russian military casualties and expanding political instability, precipitating highly organized mass protests and the imprisonment of Russian citizens. China has sustained diplomatic and propagandistic support, supplied arms, and continued its economic relationship with Russia.

War Scenario 3: Highly repressive occupation of Ukraine; revanchism; partial reestablishment of Soviet territories

Overview

Russia has annexed a large percentage of Ukraine and has taken Kyiv; the occupation has become hyper-repressive but archipelagic (particularly in western Ukraine); Ukraine has established an insurgency, but Russian forces suppress insurgent activity with disproportionate force (possible use of biological or chemical weapons); the insurgency has failed to impact Russian control of Kyiv materially but has persisted; the West has continued to impose sanctions, while the US and NATO allies' weapons transfers have occurred with a lower frequency, and NATO has deployed a more significant number of troops to frontline states; Russian forces have captured or killed Zelensky, the line of succession has remained undefined, and leadership has struggled to establish an effective government in exile.

Outcome

Given the highly repressive nature of the occupation, limited arms transfers, and ineffectiveness of the insurgency, an occupation government has become increasingly realized. Russian occupying forces have established an unstable administration. Sanctions, including US/EU targeting of Russian oil exports, have battered the Russian economy and isolated Russian citizens. Demonstrations have become highly organized, but Putin has resorted to the highly repressive, violent tactics of a police state to suppress dissent. Protests have become less organized against the prospect of escalating state-perpetrated violence. The elites and military have remained loyal to Putin. The popular uprising has been adequately controlled and has not posed a material threat to Putin's regime.

With Ukraine partially occupied and Russia's internal dissent adequately suppressed, Putin has expanded his territorial pursuits to include states that once comprised the Soviet Union. His ultimate objective has been to reconstitute the Soviet Union. He has officially and publicly absorbed Belarus as a legally binding Russian territory. He has subsumed Moldova and Georgia (neither country is a NATO member) and targeted the Baltic states. NATO has become increasingly galvanized by Putin's revanchism. Still, because he has not attacked a NATO member directly, Article V has not been triggered, and therefore, NATO's response has been necessarily limited. China has continued the status quo diplomatic, propagandistic, and economic support and supplied arms (and publicly distanced itself). The world has entered a global recession, as energy prices have risen and investor confidence has decreased. The expansion of Russian aggression has exacerbated the refugee crisis, which has remained largely unaddressed due to the logistical impediments caused by ongoing, geographically extended hostilities. The humanitarian crisis has deepened, death rates have climbed, domestic political instability has increased as national economies have failed to support the influx of refugees across impacted states, and the EU's economy has contracted drastically and complicated diplomatic negotiations.

War Scenario 4: NATO-Russia war

Overview

The war has escalated into a direct armed confrontation between NATO and Russia through a single catalytic action or interlinked, progressive catalytic events. Below are four possible progressions that could have led to a NATO-Russian war:

1. A deliberate, direct military attack against a NATO member (Baltic states) has triggered Article V. (Example: Putin's strategic decision to bridge the Suwalki gap has demanded action under Article V.)
2. An accidental or inadvertent attack caused by miscalculation against a NATO member has triggered Article 5. (Example: Mistakes in Russian targeting in Ukraine's surrounding borderlands.)
3. The use of tactical nuclear weapons by Russia. (Example: Russian forces have continued to fail to take strategic cities with conventional weaponry, and domestic dissent in Russia has increased in response to economic collapse, which has forced Putin to introduce tactical nuclear weapons to ensure the achievement of military objectives in Ukraine before Russian internal stability threatens his political position).
4. NATO has declared a no-fly zone over Ukraine (the no-fly zone expands the war's parameters).
5. Russia has used biological or chemical weapons (NATO has yet to publicly determine whether the use of biological or chemical weapons in Ukraine would trigger Article V. NATO Secretary-General has indicated that spillover impacts of radiological or chemical weapon use in Ukraine would trigger sanctions, but there has been no explicit reference to Article 5).[53]

Outcome

A NATO-Russian war has represented the most devastating global geopolitical and economic outcome. The European continent has existed in a highly precarious, unstable geopolitical environment against US/EU sanctions on Russian oil exports. The active prosecution of a war with Russia has raised energy prices and precipitated a global recession. The West has not sufficiently addressed the refugee crisis due to ongoing conflict and collapsing national economies. The EU economy has continued to contract, and domestic political instability has increased. China has provided economic support to Russia but has publicly distanced itself from Russian action. A procedural coup prosecuted by the Russian military and elites has threatened Putin's rule.

Four Implication Scenarios Mapping the Global Habitat Following the War in Ukraine
The proceeding scenarios provide four logically consistent possible post-Russia-Ukraine war futures and present a broad spectrum of projections expressing four reasonable trajectories considered outward to 2027.

[53] NYTimes March 2022

Summary of scenario development methodology:[54]

1. Identification of a broad collection of factors that may impact the macroeconomic, geopolitical, and security habitats outward to 2027
2. Shortlisting of factors through influence analysis to establish each factor's relative degree of salience
3. Determining, through an augmented hierarchical cluster analysis, which factors possessed the highest degree of explicit or implicit influence on the 2027 habitat
4. Employing a numerical ranking system to ensure the inclusion of a broad range of dynamic factors that vary in their relative operative influence
5. Incorporating shortlisted factors into modular narratives where narrative structures act as the logical buttress for the four final scenarios.

Table 1 summarizes the composition of each scenario. The four scenarios are not clinical forecasts but consider a broad spectrum of possible futures outward to 2027. The scenarios endeavor to map the mutating underlying causal structures inherent to progressing event timelines and present reasonable trajectories ordered against converging systems' current operational atmosphere:

Implication Scenario 1: A Unified and Aggressive West
Aggressive, coordinated US-EU bilateral contestation of China and Russia supports fully realized European strategic autonomy.

Implication Scenario 2: **New Species of Combative Multipolarity**
Great power dysfunction and cross-categorical contestation destabilize global systems.

Implication Scenario 3: **Entrenched Global Fragmentation**
Decreased NATO integration, sovereign debt defaults, a fracturing Western alliance system, and increasingly adversarial relations between the US and China increase dysfunction across global systems.

Implication Scenario 4: **Aggressive Bifurcation**
The West and the China-Russia asymmetrical duumvirate administer competing spheres of influence.

[54] See Annex and Numerical Methodology for detailed description of scenario methodology.
Annex Link: https://acrobat.adobe.com/link/track?uri=urn:aaid:scds:US:793cd78f-dd44-36d3-a8fe-8f6fa8f20d50
Numerical Methodology Link: https://1drv.ms/x/s!AvYKU8Ab4k1KlBATHxKUFMEVNXye

	Implication Scenario 1: A Unified and Aggressive West	**Implication Scenario 2: New Species of Combative Multipolarity**	**Implication Scenario 3: Entrenched Global Fragmentation**	**Implication Scenario 4: Aggressive Bifurcation**
Probability of sovereign debt defaults	Decreases	No change	Increases	Increases
Western sanctions imposed on Russia	Decrease	No change	Increase	Increase
Probability of the refugee crisis precipitating political instability	Decreases	Increases	Increases	Increases
Probability of global food security precipitating political instability	Decreases	Increases	Increases	Increases
EU institutional resilience	Increases	No significant change, but uncertainties stress alliance systems	Increases	Increases, but coherence remains fragile
EU support for European strategic autonomy	Increases (primarily realized through increased aggregate defense spending)	Increases (primarily realized through increased aggregate defense spending)	Increases (active leadership of EU in NATO and decreased dependence on the US)	Increases (active leadership of EU in NATO and decreased dependence on the US)
The global significance of national elections (US (midterms and 2024 general), France, and Hungary)	Decreases, but legislative continuity remains paramount across factor categories	Increases	Increases	Increases

Table 1: Scenario Composition Summaries

Presentation of Scenarios

Implication Scenario 1: A Unified and Aggressive West
Implication Scenario 2: New Species of Combative Multipolarity
Implication Scenario 3: Entrenched Global Fragmentation

Implication Scenario 4: Aggressive Bifurcation

Scenario Question: Following the Russian invasion of Ukraine, what will the global geopolitical, macroeconomic, and security habitat look like in 2027?[55]

Box 2: Defining "Habitat"[56]

Each scenario explores a complex adaptive system's divergent future iterations (with the considered system defined as international relations augmented to include global market elements). Within the broader scenario construct, the "Habitats" represent bounded, interdependent spheres that allow the analysis to examine the shifting dynamics between three overlapping policy areas (Geopolitics, Macroeconomics, and Security). Fundamentally, each "Habitat" (as a sub-tier within the broader scenario "ecosystem") presents a collection of unique, interactive determinants (see Figure 16 for a limited, non-exhaustive list of determinants) specific to the bounded policy area (strategic autonomy, deglobalization, NPT outcomes, etc.) that buttress the overarching scenario narrative, which, in turn, maps the essential features of the complex adaptive system by developing an expansive "ecosystem" comprised of entropic interconnections across thematic domains or "Habitats."

[56] See figure 16 for graphical representation.

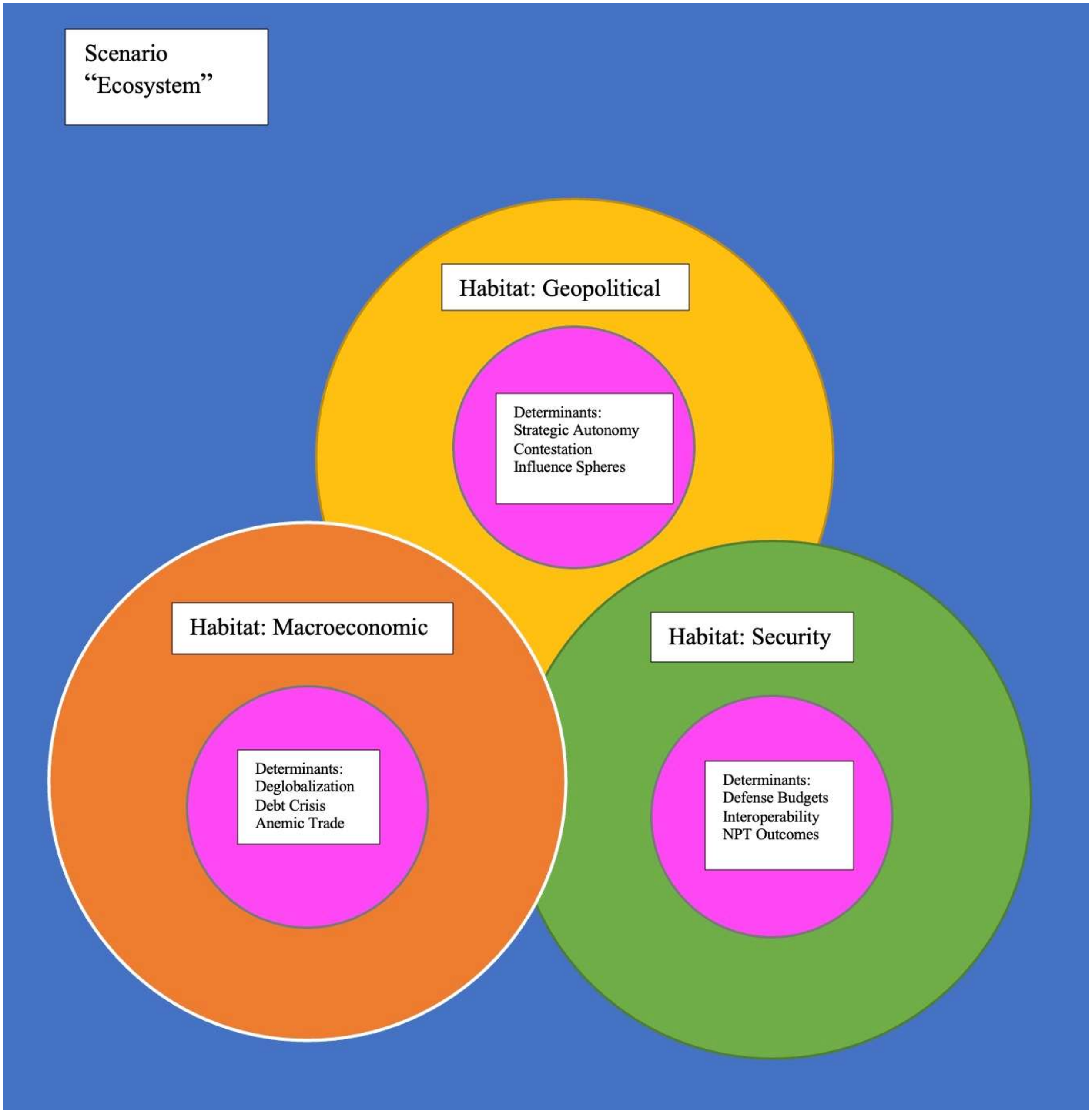

Figure 16: Habitats Comprising the Broader Scenario "Ecosystem"

Implication Scenario 1: A Unified and Aggressive West

Overview

In 2027, the Russian invasion of Ukraine has continued to galvanize Western alliance systems; Western strategic cooperation flourished across geopolitical, macroeconomic, and security categories; NATO has demonstrated consistent integration and resilience; European strategic autonomy in defense has become sufficiently robust; NATO allies and EU governments have worked in concert to contest the unilateral and bilateral geopolitical advances of Russia and China; Western states have oriented away from Russian and cultivated new energy and raw material sources; the US and EU have cooperated on stabilization missions in Sub Saharan Africa, which have contributed to increased political stability and limited Russian and Chinese influence; commodity markets have stabilized, and investor confidence has returned to global markets; the cumulative result is a more unified West, which has pursued a harmonized, increasingly aggressive strategy against the geopolitical advances of Russia and China.

Geopolitical Habitat

The Russian invasion of Ukraine represented the conclusion of a thirty-year post-Cold War cycle of international relations defined by relative European peace, hyper-expansion of globalization, and the predominance of US power. The cessation of hostilities and the administration of the subsequent peace agreement provisions have sundered the prevailing international order and introduced a new cycle established upon the unified, aggressive geopolitical strategies of a dynamized West.

Macroeconomic Habitat

A new era of deglobalization has begun, defined by contracted world trade and limited global economic growth. While international markets have stabilized, new regulatory structures have complicated financial operations. Western states have pursued coordinated policies to address the new global relations cycle's unique economic and trade conditions. The US and EU have increasingly cooperated on economic policies directed towards Russia, China, Indo-Pacific countries, and the emerging economies of Sub-Saharan Africa.

Security Habitat

European strategic autonomy has become fully realized. EU governments have increased defense spending to 2% (or above) of GDP. The US, EU, and the UK have renewed the transatlantic partnership through material defense coordination. Security policies, driven by an expanding collection of strategic immediacies, have manifested in increased military interoperability and the deliberate commitment of NATO members to arms modernization and sufficient personnel deployment.

Outcomes

The credibility of NATO and Western alliance systems more broadly has increased. In the immediate postwar years, the West was highly cooperative. This galvanization has allowed Western nations to pursue unified, aggressive policies that limit Russian and Chinese strategic power expansion. Moreover, military interoperability has supported the full realization of European strategic autonomy in defense. Finally, the EU and US have worked together to organize energy security considerations and mitigate risk.

Commodity markets have largely stabilized. Global bond yields have returned to prewar levels. The US and EU have increasingly coordinated energy and raw material sourcing while jointly supporting emerging economies and facilitating foreign investment. In addition, western states have taken measures to address global supply chain functionality and resilience.

Implication Scenario 2: New Species of Combative Multipolarity

Overview

The lingering Ukraine-Russia stalemate has precipitated combative multipolarity defined by great power dysfunction and cross-categorical contestation; China has increased its belligerent activity in the South China Sea and expanded its rhetoric towards Taiwan; the US has countered China's aggression by strengthening Indo-Pacific alliance systems (particularly the Quad); China has offered a weakened Russia implicit (Security Council veto) and explicit (coordinated propaganda) assistance; the US has expanded Russian sanctions and actively opposed Chinese economic and military support for Russia as Putin's occupation has faltered; bond yields have increased and presaged successive sovereign debt defaults (defaults began with Russia, Ukraine, and Belarus, and continued to proximal states); the refugee crisis has intensified and increased domestic instability; the EU has accelerated strategic autonomy but the scope fails to consider broad geoeconomic considerations; the US and EU have remained functionally aligned in security policy response and NATO has proven resilient in coordinated defense actions; fractures have become visible in the US-EU relationship, particularity concerning energy sourcing and domestic political instability precipitated by sanctions; instability has increased in Sub Saharan African states due to food shortages and commodity market volatility; though volatile, combative multipolarity has allowed global systems and globalization to function; multilateral institutions have operated with intermittent cooperation between the US and China regarding climate change and trade policy; through strategic autonomy in defense, the EU has accepted great power responsibilities to balance China's aggression.

Geopolitical Habitat

Russia has become a pariah state. China has continued to support Russia, where such support aligns with its self-interest. The EU's accelerated path to strategic autonomy has afforded the Union significant influence. Continued multilateral cooperation on climate change and trade has tempered the volatility of the habitat.

Macroeconomic Habitat

Deglobalization has become more entrenched as world trade has continued its contraction and impeded economic growth. Ukrainian and Russian wheat exportation has yet to recover, exacerbating famine conditions in East Africa and contributing to social instability.[57] Multilateral institutions have operated with variable US-China cooperation. Rising bond yields and the threat of sovereign debt defaults have contracted markets, while the Ukraine-Russia stalemate has increased volatility in commodity markets. The US and EU leaders have faced significant domestic political consequences for high energy prices. Continued hostilities have negatively impacted global food distribution as wheat supplies have decreased and fertilizer costs have increased. Supply chain functionality has decreased.

Security Habitat

Continued hostilities have accelerated the EU's course towards strategic autonomy. National governments have increased defense spending above 2% of GDP, the US has focused on strengthening its security alliances in the Indo-Pacific through the Quad, and ongoing hostilities have jeopardized the

[57] A prolonged drought coupled with the Ethiopian civil war has caused increasingly grim famine conditions in East Africa.

future of the Nuclear Nonproliferation Treaty (NPT). The US and EU (to a lesser extent) have committed to more frequent public condemnations regarding China's belligerence in the South China Sea and increasingly blatant aggression towards Taiwan. NATO has conducted regular arms transfers with the Ukrainian insurgency. The Russian occupation of Ukraine has become unsustainable and exacerbated the precarity of Europe's security habitat.

Outcomes

The realization of strategic autonomy in defense has increased the credibility of NATO. Hostilities have threatened the future of the NPT and European arms control more broadly. The strategic relationship between China and Russia has continued (though less publicly). The functionality of multilateral institutions has remained constant, and cooperation on climate change and trade has remained relatively stable. Multipolarity has devolved from competitive to combative in security and third-party resource sourcing policy areas.

Commodity markets have remained volatile while the threat of sovereign debt defaults has diminished investor confidence. Moreover, combative actions have defined the US, Russia, and China's approach in Sub-Saharan Africa, while the region's resource-producing states have experienced increased domestic instability due to food shortages and a destabilized extractive sector. Ultimately, combative multipolarity has permitted functional global systems, but the precarity of the Ukraine-Russia stalemate has profoundly destabilized the international order.

Implication Scenario 3: Entrenched Global Fragmentation

Overview

The repressive occupation of Ukraine and expanded Russian aggression toward former Soviet states has precipitated rising bond yields and sovereign debt defaults, upending the global economy; commodity markets have exhibited increased volatility and energy prices have risen to unprecedented levels; commodity market volatility, energy prices, and food shortages have contracted emerging markets and increased domestic instability across Sub Saharan Africa; internal dissent has increased within Russia; alliance systems have begun to fracture amidst the war's extended timeline and scope; NATO integration has decreased and the unified approach of Western actors has faltered; multilateral institutions (WB, IMF, WTO and UN) have become dysfunctional bodies unable to reach consensus decisions; Russia and China's veto in the Security Council has proven an intractable procedural impediment that has left the Security Council an edentulous body incapable of directing policy; Russia and China have continued to pursue their relationship where self-interest has dictated it; Russia and China have increased their presences in the Artic; nuclear program development has become an area of exploration for national governments; Europe's instability has introduced entrenched fragmentation within the global order, precipitating increasingly adversarial relations between the US and China.

Geopolitical Habitat

Increased levels of instability have decreased aggregate global cooperation. Moreover, the US has pursued aggressive contestation policies toward China and Russia, which have harmed multilateral institutions and US-China bilateral cooperation on climate change and trade policies. Though US-EU relations have exhibited fractures, the EU has supported US efforts to contest Russia and China's geopolitical aggression (reducing Russian and Chinese influence in Sub-Saharan Africa and their incursions into the Arctic).

Macroeconomic Habitat

Deglobalization has begun sundering former international trade connections. The global economy has entered a prolonged recession due to contracting international trade and rising energy prices, while the refugee crisis has caused an increase in domestic instability. Bond yields have risen, and sovereign debt defaults have contracted the European economy. Emerging markets in Sub-Saharan Africa have suffered due to the contraction of international trade, food shortages, domestic instability, and commodity market volatility. The refugee crisis and sovereign debt defaults have contributed to the EU Stability and Growth Policy debate's contentiousness and dysfunction. EU national governments have failed to establish policies regarding domestic government spending.

Security Habitat

Increased global instability has hyper-accelerated Europe's course to strategic autonomy and has raised defense spending well above the 2% of GDP threshold. Divergences in NATO's decision-making have become more frequent and politically necessary, as the US and EU have considered policies that have addressed the concerns of their domestic political constituencies. Foreign policy and energy sourcing decisions have become increasingly dependent on the caprices of fickle domestic populations (two-level game application).[58] Western powers have postponed the NPT. Russia and China have entered the Arctic with an increasingly strategic focus.

Outcomes

Fragmented alliance systems have exacerbated global instability. China and Russia have caused profound dysfunction and consistent imbalance in the WTO, negatively impacting the global economy and international trade. The EU has accelerated strategic autonomy objectives, but the transatlantic partnership has frayed beneath rising energy costs and the economic and political fallout of the refugee crisis. Russia's expansion of hostilities into former Soviet states has precipitated sovereign debt defaults and has increased the probability of a NATO-Russian war. The West has contested Russian and Chinese influence in Sub-Saharan Africa's emerging economies and expanded its presence in the Arctic to combat Russian and Chinese belligerence. As a result, globalization has lost much of its dynamism and has become increasingly fragmented. Western leaders have addressed the waning support of domestic populations by exhibiting divergent decision-making regarding Russian sanctions and NATO's strategic objectives. Aggregate global fragmentation has become increasingly entrenched, exacerbating the precarity of international markets and economies.

Implication Scenario 4: Aggressive Bifurcation

Overview

The NATO-Russia war has caused an aggressive global bifurcation between the West and the China-Russia "asymmetrical duumvirate"[59] (supported by a subordinated network of dependent

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[58] Putnam, "Two-Level Games", 1988: https://www.jstor.org/stable/2706785

[59] In their March 19th edition, The Economist defined Scenario 4's possible alternative world order as a Russia-China led "axis of autocracies." The term, "asymmetrical duumvirate" attempts to provide nuance to "axis of autocracy" by defining the unequal nature of the China-Russia relationship (with China having leverage) and

autocracies) that has encompassed geopolitics, trade, and security; Russia has broadened its territorial aims to include the former states of the Soviet Union; Europe has achieved strategic autonomy and the war has tested the interoperability of military assets; NATO has unified around the existential crisis; the probability of nuclear war has increased exponentially; national governments have begun explicitly considering the development of nuclear weapons programs; the global recession has deepened as international trade has contracted; a new era of deglobalization has become fully realized; contracting trade activity has destroyed emerging economies reliant on exports; food shortages, deglobalization, and volatile commodity markets have increased domestic stability across Sub Saharan Africa; lack of food security precipitated pockets of regional instability and violence across emerging economies; bond yields have risen to unsustainable levels; a significant number the proximal states surrounding Ukraine have defaulted on their sovereign debt, which has precipitated devastating economic repercussions in the Eurozone; beyond the Eurozone, cascading defaults occurred across a broad collection of emerging economies; energy prices have increased substantially; the refugee crisis has caused domestic instability across Europe, which has led to the contraction of national economies; a new virulent, repressive strand of populism has spread across Europe as domestic populations demand immigration policy reversals.

Geopolitical Habitat

The NATO-Russia war has bifurcated the world into two distinct domains. The West administers a subset of spheres, while simultaneously, the China-Russia asymmetrical duumvirate (supported by a subordinated network of dependent autocracies) dominates a parallel collection of spheres. Policy discussions surrounding economic, trade, and security issues have devolved into stifled affairs comprised of strictly binary strategic choices. The West has pivoted away from trading with the asymmetrical duumvirate and adjacent autocratic states. Western states have aggressively contested the asymmetrical duumvirate's influence in Sub-Saharan Africa (Sub-Saharan states have suffered increased political instability). The West has contested the asymmetrical duumvirate's aggression in the Arctic, which China and Russia define as the new strategic frontier. The two competing domains have severed many connections that defined the post-Cold War international order.

Macroeconomic Habitat

Deglobalization has become entrenched. International trade has contracted, and global economic growth has become anemic. Emerging economies have suffered due to a lack of export revenue, while sovereign debt defaults have damaged European economies and negatively impacted global markets, resulting in a global recession. Economic precarity with European national governments has precipitated a new wave of populism. The bifurcation between the West and the Russia-China asymmetrical duumvirate has caused widespread regulatory confusion among investors, the global finance industry, and multinational corporations as trade and engagement laws have evolved. Investor attention has shifted towards the Artic.

Security Habitat

The NATO-Russian war has engulfed Europe. Russia's aggression has expanded to include former Soviet states. China has supported Russian aggression through economic and propagandistic relief. NATO has remained highly integrated. Fully realized European strategic autonomy has supported

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explicitly addressing the network of autocracies (including those in the Middle East, Africa, Eastern Europe), which arrange their power around self-interest rather than a broad organizing principle or ideological vision of a future world order.

NATO's strategic efforts. The probability of nuclear war has increased, and national governments have contemplated developing nuclear weapons programs.

States Parties have postponed the NPT indefinitely (the West has speculated regarding the Treaty's viability). China has explicitly introduced the political foundation upon which to prosecute the invasion of Taiwan. The US has countered by shifting military assets and personnel to Japan. The West has contested China and Russia's influence in Sub-Saharan Africa. The West has increased its operations in the Arctic and has aggressively challenged the advances of China and Russia, who have more closely coordinated their regional strategic efforts.

Outcomes

The world has experienced a fundamental shift in the international order. The West and the China-Russia "asymmetrical duumvirate" have engaged in limited trade and diplomacy. NATO has sustained its integration while European strategic autonomy has increased military interoperability. The war has galvanized the transatlantic relationship. The global security situation has deteriorated on five fronts: the open NATO-Russia war, the Arctic, the Taiwan Strait, Sub-Saharan Africa, and nuclear proliferation. The global recession, deglobalization, and contracting international trade have exacerbated security concerns. Sovereign debt defaults have jeopardized markets and upended domestic economies. Western powers have explored new energy and raw material sources as basic material costs have risen.

Chapter Four: Scenario Narrative Implications

Introduction

Chapter 4 considers the broad implications of the four scenario narratives on the tactical designs organized around investment allocations to Eurozone banks. The analysis weighs the implications of the scenario variables against the possible strategic trajectories of increased investment allocations. In addition to presenting governing uncertainties and tethered risk projections, each implication analysis considers a black swan event unique to the specific scenario narrative.

Objective: Determining the viability of a tactical shift towards increased investment allocations to Eurozone banks.

Diagnostic: How may the scenarios manifest risk and enervate the utility of overweight investment allocation strategies?

Scenario 1: A Unified and Aggressive West

Governing Uncertainties:

1. Institutional Cohesion
2. Investor Confidence
3. The precarity of Ukrainian Postwar Reconstruction

If a broad postwar stabilization dynamizes the EU's aggregate institutional capacity, Eurozone banks' profitability will increase as uncertainty decreases and commodity prices reach a tentative equilibrium.

Eurozone banks benefit from a high degree of EU institutional quality. Continued EU cohesion is essential to stabilizing markets, engendering investor confidence, and increasing foreign investment. The aggregate financial impacts of this broadly stabilized environment on Eurozone banks include robust balance sheets, increased share prices, strong valuations, and substantial dividend distributions. Further, postwar stability's net positive impact across sectors limits the viability of populist politicians and increases political stability. Finally, due to high levels of cooperation and diminished volatility, national governments achieved a consensus regarding EU fiscal parameters through the Stability and Growth Pact (SGP). The SGP's codified, forward-looking fiscal provisions reassure markets and encourage postwar lending at higher interest rates, which strengthens Eurozone banks' balance sheets and supports the aggregate growth of the banking sector.

Entrenched multi-tier corruption within Ukraine's postwar reconstruction process. Stable post-war markets and political systems facilitate Ukraine's securing of private financing for post-war reconstruction by providing an atmosphere conducive to regulatory reform implementation. The government's expanded capacity (predicated upon the stabilized investment atmosphere) to improve private real estate market efficiency and provide a fertile investment environment increases Eurozone banks' profitability from financing and loan disbursements over time. Dynamized EU institutional cohesion supports increased transparency and facilitates Ukraine's pursuit of rule of law reforms, resulting in an expanding spectrum of financing and investment opportunities.

Transparency International's Corruption Perception Index, which considers and quantifies perceived public sector corruption, ranks Ukraine 122 out of 180 countries. However, broad Western support and a stable postwar environment may propel Ukraine into the top half of the index.[60] The Ukrainian government possesses the necessary multilateral resources to implement judicial reforms designed to temper the corruption concerns of international creditors and accelerate private foreign investor activity in the near and medium terms. With readily available credit, the Ukrainian government entertains the option of privatizing its state-owned enterprises (SOE), increasing public trust in governance, and encouraging private investment.[61]

The Russian invasion disrupted several years of successful reform and restructuring within Ukraine's banking sector (beleaguered since the 2008 financial crisis). Implementing International Financial Reporting Standards (IFRS) and Basel III standards increased the viability of a prolonged recovery.[62] From October 2018 to September 2021, the banking sector's prewar return on equity (ROE) increased in the aggregate.[63] The upward trajectory of the sector's ROE, beginning in 2018, represents a marked shift, as the sectors reported negative ROE percentages from 2013-2017.[64] The twinning, prewar foundational forces of successful regulatory reform and increased profitability (demonstrated through improved ROE percentages) suggest that the postwar operational environment may invite BNP to expand

[60] Corruption Perception Index: https://www.transparency.org/en/cpi/2021

[61] Rand, "Rebuilding Ukraine," April 2022

[62] "Basel III is an internationally agreed set of measures developed by the Basel Committee on Banking Supervision in response to the financial crisis of 2007-09. The measures aim to strengthen the regulation, supervision and risk management of banks.": https://www.bis.org/bcbs/basel3.htm

[63] "Monthly return on equity (ROE) of banks in Ukraine from September 2018 to September 2021": https://www.statista.com/statistics/876211/return-on-equity-of-banks-in-ukraine/

[64] Raiffeisen Bank International CEE report: https://www.discover-cee.com/the-ukrainian-banking-sector-seven-stable-years-ahead/

lending services and overall exposure to Ukraine (BNP's prewar exposure to Ukraine was $1.8 billion while the firm's Ukrainian banking sector market share hovered around 3-5 percent).[65]

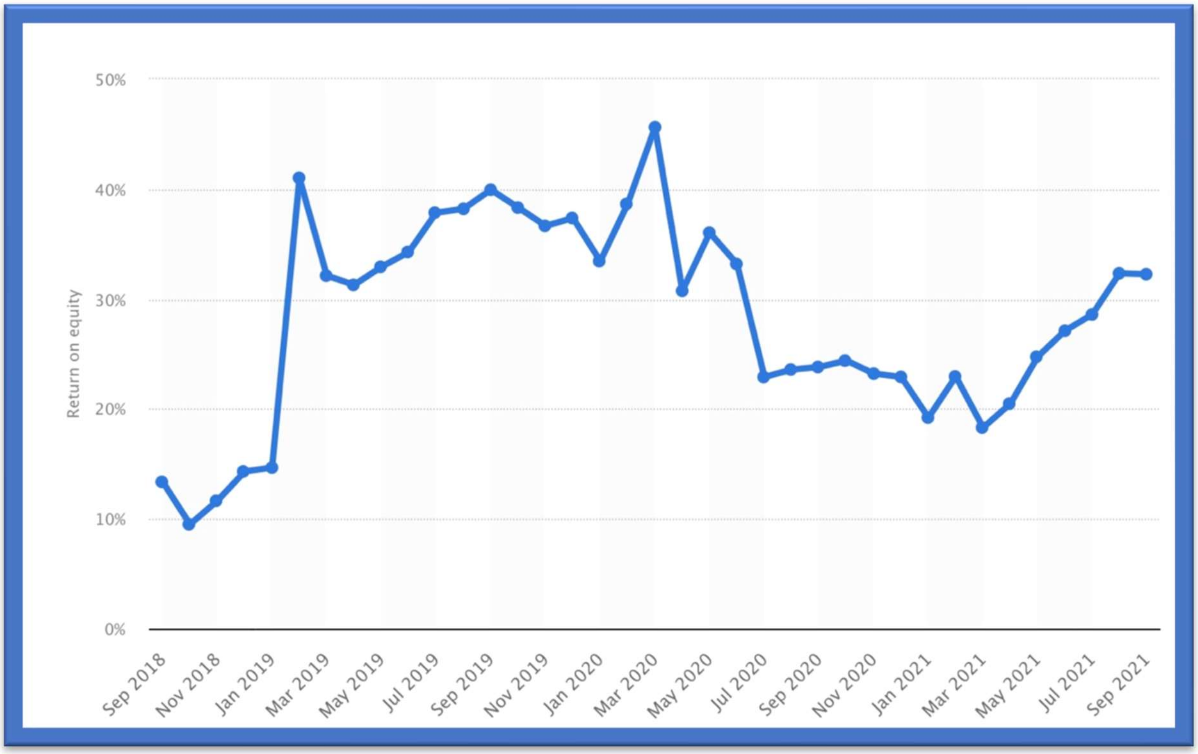

Figure 17: Monthly return on equity (ROE) of banks in Ukraine from September 2018 to September 2021

Considering pan-eurozone exposure, BNP will likely benefit from recent global regulatory developments addressing capital requirements. In a significant policy shift, the Bank of International Settlements (BIS) announced that the largest eurozone "banks will have their cross-border exposures within the bloc treated more like domestic ones, which could reduce the amount of extra capital they need to cover their systemic importance."[66] BIS regulators have organized Eurozone banks into five distinct tiers to determine appropriate capital requirements. The ordering criteria include "size, complexity, cross-border activity, interconnectedness, sustainability, and financial institution infrastructure."[67] The capital requirements for each tier increase progressively, from 1% in the lowest tier to 3.5% in the highest tier.[68] Currently inhabiting tier three, BNP's capital requirement is 2%, but within the new regulatory structure, BNP will likely occupy the fourth tier, reducing their capital requirement to 1.5%.[69] The excess of capital will allow BNP, already a foremost lender to eurozone businesses and households with aggregate assets

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[65] AA: https://www.aa.com.tr/en/economy/bnp-paribas-says-exposure-to-ukraine-russia-at-33b/2529140
Raiffeisen Bank International CEE report: https://www.discover-cee.com/the-ukrainian-banking-sector-seven-stable-years-ahead/
[66] FT, BNP Paribas to Benefit from Change to Eurozone Exposure Rules: https://www.ft.com/content/adb97a6a-d93b-4d14-b7d5-07350a3dace2
[67] Ibid.
[68] Ibid.
[69] Ibid.

of €2.6tn, to expand its pursuit of regional mergers and consider investment allocations supporting Ukraine's postwar reconstruction.[70]

Black Swan Event: **Under Article 7 of the Treaty on European Union, the European Council suspends the voting rights of Hungary and Poland.**[71]

Background

In 2017 and 2018, the European Council (EC) initiated Article 7 procedures against Poland and Hungary, respectively. Still, EU member states did not hold the formal vote required to determine whether the two member states in breach of the EU's binding values demonstrated "a clear risk of a serious breach" of Article 2. Subsequently, Hungary and Poland blocked the Commission's proceedings against each other, constraining the Council's ability to organize a vote and allowing Hungary and Poland to retain Union voting rights.

In April 2022, due to consistent Article 2 and rule of law breaches, the European Commission determined that it would trigger the newly codified conditionality mechanism.[72] The conditionality mechanism tangentially relates to Article 7 provisions. The differentiating feature of the conditionality mechanism is that Article 2 and rule of law breaches by member states result in the suspension of EU budgetary funding rather than voting rights. Therefore, the EU invoking the conditionality mechanism could freeze Hungary's 6.14 billion euro share of the EU budget.[73]

In early May 2022, Hungary blocked the EU's attempt to impose a Russian oil embargo. Viktor Orban argues that because Hungary sources 64% of its petroleum and 85% of its natural gas from Russia, an embargo would contract Hungary's GDP.[74] In addition, Orban may consider that an embargo would render deleterious political consequences and that the modernization of Hungary's energy infrastructure is not viable due to public sector corruption and deficient governance. Finally, the timing suggests that Orban's strategy is to weaponize Hungary's voting rights and employ the blocking of a Russian oil embargo as leverage to unfreeze Hungary's EU budgetary funds.

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[70] FT, BNP Paribas to Benefit from Change to Eurozone Exposure Rules: https://www.ft.com/content/adb97a6a-d93b-4d14-b7d5-07350a3dace2

[71] Article 7 provides a legal mechanism through which the European Council may suspend certain rights afforded EU Member States, particularly voting rights. The European Council may determine (by a four fifths majority) that "there is a clear risk of a serious breach by a Member State of the values referred to in Article 2 (respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities)". Should the Council reach an affirmative, unanimous decision confirming "a serious and persistent breach," the Council, acting as a qualified majority, may suspend the voting rights of the errant Member State.

[72] The EU adopted the conditionality mechanism in support of the Union's unprecedented expansionary COVID-19 fiscal policies (funded through common debt) to ensure that funding was not diluted by corrupt national governments.

[73] Euronews, April 2022.: https://www.euronews.com/my-europe/2022/04/06/rule-of-law-what-happens-after-brussels-triggers-the-conditionality-mechanism-against-hung

[74] NYTimes, May 2022: https://www.nytimes.com/live/2022/05/11/world/ukraine-russia-war-news

Black Swan Event Particulars

In 2023, following consistent breaches of the rule of law provisions outlined in Article 7 and the continued blocking of the Russian oil embargo and adjacent EU initiatives, the European Council aggressively pursued the Article 7 procedure against Hungary. However, unlike previous Article 7 procures, the European Council swiftly organized a vote, achieved a qualified majority, and suspended Hungary's Council voting rights.

The market presented an initial downward response to the suspension of Hungary's voting rights. Investors anticipating entrenched, internal EU instability demonstrated a decrease in confidence. Eurozone bank share prices dropped as investors determined the voting rights suspension's impact on the Stability and Growth Pact debate. Immediately following the voting rights suspension, Orban signaled the beginning of Hungary's incremental orientation towards Russia.

The transatlantic partnership and the broader matrix of Western alliance systems faltered as Hungary's voting rights suspension jeopardized Western unification against Russia. Hungary's considered drift into the Russian sphere precipitated higher market volatility, destabilized political systems, and tempered macroeconomic outlooks. Investors weighed the possibility of cascading, interrelated risks surrounding Hungary's voting rights suspension, particularly how a lasting internal EU cleavage may impact Hungary's historical dependence on foreign credit provided by European banks.[75] Specifically considering BNP, the bank's total asset allocation in Hungary is small relative to the firm's eurozone exposure.[76] Still, the possible sale of BNP's consumer finance businesses across eastern Europe (including Hungary) will allow the bank to raise additional cash for regional mergers, maximizing the advantage of the BIS's reduced capital requirements.[77] Finally, Eurozone banks reconsidered their exposure to Hungary's public and private sectors as endogenous political fragmentation destabilized European credit markets (Hungary's bond yields should rise in reaction to the voting rights suspension event, indicating that the medium-term risk is sovereign debt default).

Scenario 2: New Species of Combative Multipolarity

Governing Uncertainties

1. Nature and Degree of European Strategic Autonomy
2. Energy Security and Price Volatility
3. Scope of Russian Sanctions and Domestic Political Corollaries

If Europe fails to achieve a conceptual expansion of strategic autonomy that integrates geoeconomic considerations (specifically energy independence, Russian sanction strategy, and a strengthened Euro) into the existing defense framework, Eurozone banks' valuations may remain low, possibly introducing downward pressure on aggregate banking sector share prices.[78]

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[75] In January 2012 (at the peak of the European sovereign debt crisis), the BBC reported that "as an economy, Hungary is very dependent on credit from abroad, especially credit provided by eurozone banks…European banks have provided $120bn of credit to Hungary's public sector and private sector, out of total international lending to Hungary of around $140bn….To put that into context, overseas lending to Hungary represents around 100% of GDP.": https://www.bbc.com/news/business-16439644

[76] The Banks.eu: BNP Hungarian Branch total assets = $1,019 bln: https://thebanks.eu/banks/14709

[77] Bloomberg, "BNP Weighs Sale of Eastern European Assets to Raise Cash": https://www.bloomberg.com/news/articles/2022-02-10/bnp-is-said-to-weigh-sale-of-eastern-europe-assets-to-raise-cash

[78] Geoeconomics: where states pursue increasingly aggressive economic and geopolitical instruments (including natural resource extraction) as leverage against the demands of a rules-based international order.

The expanded conception of European strategic autonomy. A protracted war and subsequent Russian occupation of eastern Ukraine accelerates the timeline of aggregate EU defense expenditures meeting NATO's 2% of GDP threshold. European strategic autonomy in defense is paramount for continental stability. Still, the failure of EU policymakers to expand the conception of strategic autonomy to include geoeconomic considerations invites instability.

Hungary's blocking of the Russian oil embargo suggests that achieving EU energy security requires an unlikely political compromise between the western EU Member States and illiberal eastern governments (Hungary and Poland). The embargo vote and the EU Commission's triggering of the conditionality mechanism against Hungary portend dysfunctional legislative debates across policy areas, including strengthening the international position of the Euro. Cross-sectoral policy dysfunction at the EU level, with Hungary and Poland employing their voting rights to impede unanimity and leveraging spoiling tactics against the conditional EU funding provisioned under Article 7, represents a significant medium-term risk for Eurozone banks. In the long-term, increasing confidence in the Euro as a currency diversification option against the dollar for foreign investors requires a stabilized, functional political environment. Entrenched political dysfunction may temper the positive impacts of a strengthened Euro on Eurozone bank valuations.

The domestic political corollaries of Russian sanctions. There is a developing linkage between Russian sanctions and domestic political instability. Western electorates demonstrate a threshold for sanctions that directly impact personal finances. Russian sanctions contribute to rising global commodity prices and exacerbate upward inflationary pressures. How European national governments balance the necessity of sanctions against social unrest and the fiscal strain precipitated by the energy crisis will determine the degree and nature of the risk to Eurozone banks. The broad, medium-term risk is that, amidst increasing social unrest due to rising gas and commodity prices, Republicans take both chambers of the US Congress, splintering congressional support for continued sanctions and jeopardizing the West's unified strategic position.

IMF projections for 2022 indicate that "Russia's economy will contract by 8.5%, inflation will reach 24%, and unemployment will double to 9.6%."[79] The comprehensive contraction of the Russian economy and government bond yields rising to 3.18% on the year suggest postwar habitat trajectories driven by social instability and an increased probability of sovereign debt default. The specific impact of increased political stability on Eurozone banks is unclear, but should supranational instability destabilize markets and force the EU to apply stringent liquidity requirements, Eurozone bank profitability and aggregate sector share prices decrease.

Black Swan Event: Cascading Sovereign debt defaults across emerging economies. A diverse, cross-sectoral assemblage of disturbances has converged on emerging markets. Rising energy and commodity prices have precipitated domestic upheaval while a meandering debt crisis contracted global economic growth. The FED and ECB have continued to tighten monetary policy, pursuing tactical half-point interest-rate increases to temper inflationary pressures. The interest-rate increases have translated into unsustainable debt service requirements for emerging national governments (high national debt levels relate to pandemic-centric borrowing) "and [have] tended to spur capital outflows."[80]

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[79] CRS, "Economic Impact of Sanctions," May 2022: https://acrobat.adobe.com/link/track?uri=urn:aaid:scds:US:24313b4b-28e8-30cd-8c3a-1a3f766e5d8c

[80] Bloomberg, "Emerging Economy Crisis", April 2022: https://www.bloomberg.com/news/features/2022-04-20/rising-food-energy-prices-are-just-the-start-of-an-emerging-economic-crisis

A series of sovereign debt defaults compounded the impacts of inflation, high commodity prices, and geopolitical instability for Eurozone banks with significant exposures to emerging markets. Instability increased across the emerging-market landscape while Eurozone banks' share prices decreased.

Scenario 3: Entrenched Global Fragmentation

Governing Uncertainties

1. Degree of NATO Cohesion
2. Stability and Growth Pact Outcomes
3. Magnitude of Refugee Crisis

If the EU's Stability and Growth Pact debates fail to produce codified spending provisions for national governments, the lack of fiscal guidance may decrease Eurozone banks' profitability, exacerbate the refugee crisis, and splinter NATO integration.

Stability and Growth Pact fails to reach an outcome regarding fiscal guidance for national governments. The EU's agreement regarding national governments' spending parameters represents an essential function that ultimately establishes and codifies the Union's budgetary discipline. The EU postponed the SGP at the advent of the pandemic and again following the Russian invasion of Ukraine. More broadly, the risk for Eurozone banks and the EU is the probability of sovereign debt defaults increasing as national governments' debt-to-GDP ratios rise in response to the war and refugee crisis. The suspension of the SGP damages cohesion within the EU, particularly between northern and southern national governments. Political fragmentation within the EU depresses Eurozone bank valuations.

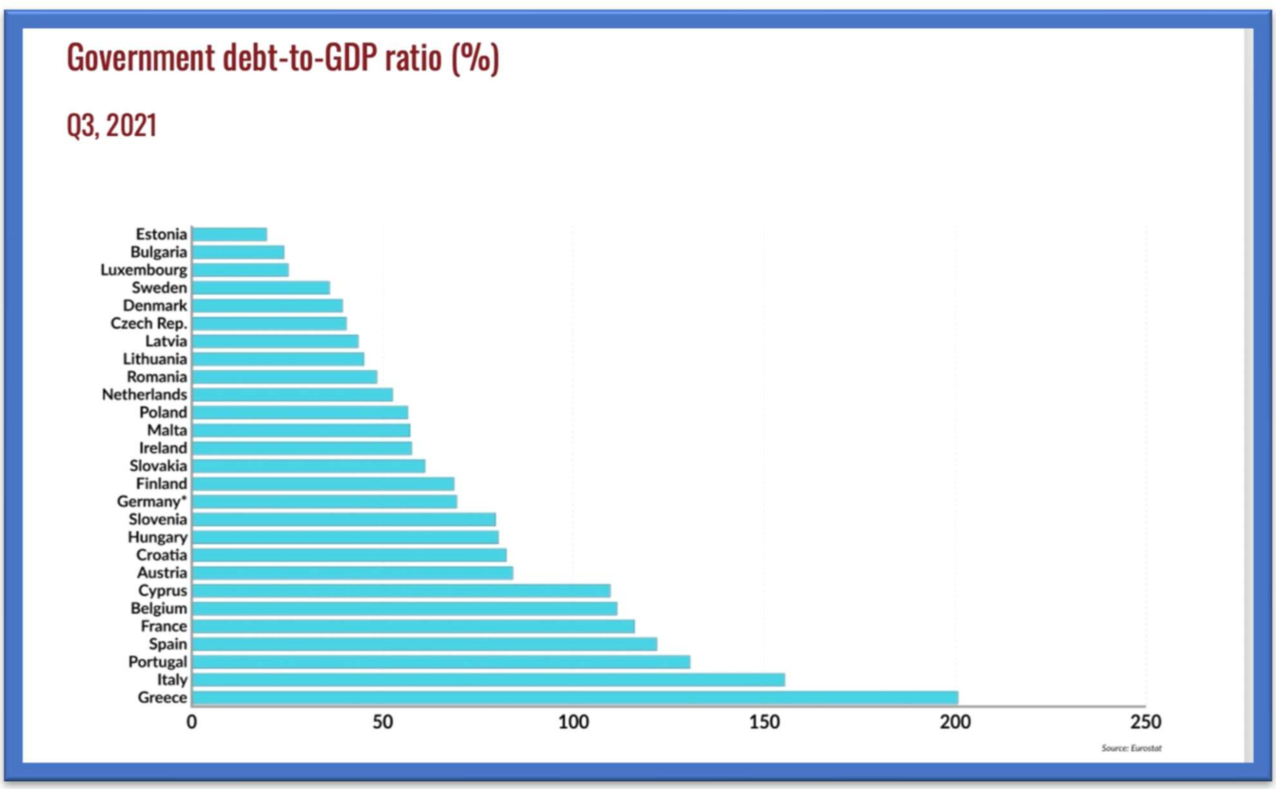

Figure 18: EU Debt-to-GDP Ratio

Extent of the refugee crisis. A prolonged war precipitates unsustainable displacements within the EU. The fiscal and political repercussions include social unrest and increases in aggregate debt-to-GDP ratios. Increases in refugee numbers embolden populist leaders and support the electoral ambitions of far-right parties. The extent of fiscal damage to national economies largely depends upon the EU extending funding quickly and consistently to national governments.

The refugee crisis requires that the EU pursue decisive action toward funding national governments' responses. Should Republicans hold both chambers of the US Congress after November 2022 (which seems likely), political dysfunction will likely constrain the US's ability to offer refugee-related aid.[81] The risk to Eurozone banks depends upon the EU coming to a resolution regarding the SGP or introducing a viable suspension mechanism (though, to avoid disruptions in funding and prolonged political fallout; ideally, the bloc would agree on a codified resolution). Failure of the Union to agree on national governments spending parameters impedes funding distribution while prolonging the crisis and corresponding political consequences.

Finally, Eurozone banks' additional risk is sweeping electoral victories for populist parties at the EU level, introducing fiscal instability into an already precarious operational situation and impeding investor confidence.

Black Swan Event: EU exit campaigns. The refugee crisis, exacerbated by the failure and suspension of the SGP, has caused Hungary to threaten the pursuit of an EU exit campaign. Hungary has employed the threat of exiting the EU and entering Russia's sphere as leverage to unfreeze EU funding and amened Article 7's rule of law provisions. The markets responded negatively to the exit campaign's reports, and Eurozone banks' share prices have decreased.

Eurozone banks' near-term risk is the degree of exposure to Hungary and the future continuity of Hungary's private markets. The medium-term risk for Eurozone banks is the failure of the EU and Hungary to resolve the underlying issues related to Article 7, as political fragmentation impacts markets and creates fiscal uncertainty.

Regarding historical EU withdrawal outcome patterns, the Brexit campaign, referendum outcome, and the aftermath of the UK's exit from the Union destabilized European markets, introduced significant political uncertainty into the Eurozone banking sector, and precipitated price declines across European equities. Following the referendum's announcement, the sterling dropped to its lowest point in 31 years, and the FTSE 100 "fell from 6338.10 to 5806.13 in the first ten minutes of trading."[82] Finally, the STOXX Europe 600 index declined by 7 percent to 321.9 (the most significant decline since the 2008 financial crisis), and the FTSEurofirst 300 dropped 6.6 percent.[83]

In addition to the broad losses across European equities, the European banking "sector index (.SX7P) fell 14.5 percent, the biggest [Brexit precipitated] sectoral faller in Europe."[84] Beyond precipitous index declines, the political uncertainty driven by the Brexit referendum and the speculative possibility of further EU withdrawals introduced upward pressure on government bond yields and yield

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[81] The Cook Political Report, "Can Democrats Turn Things Around": https://www.cookpolitical.com/analysis/national/national-politics/can-democrats-turn-things-around

[82] Brexit and the banking sector: https://www.researchgate.net/publication/349990042_Brexit_and_the_Banking_Sector_The_Stock_Market_Reaction_of_UK_and_European_Banks

[83] Reuters, "Banks Plunge": https://www.reuters.com/article/europe-stocks/banks-plunge-as-brexit-vote-sends-european-shares-reeling-idINKCN0ZA33F

[84] Ibid.

spreads, further jeopardizing banks with significant exposure to sovereign debt.[85] Moreover, Brexit increased aggregate pan-European political risk and raised the probability of cascading populist electoral triumphs across Europe as countries (including Italy and Spain) prepared for imminent general elections. The underlying social danger (the uncertainty surrounding electoral projections was already disrupting equity and bond markets) was that establishment forces would fail to contain the dynamized proliferation of populism, entrenching political instability in western Europe and expanding the creeping reach of newly validated populist parties.

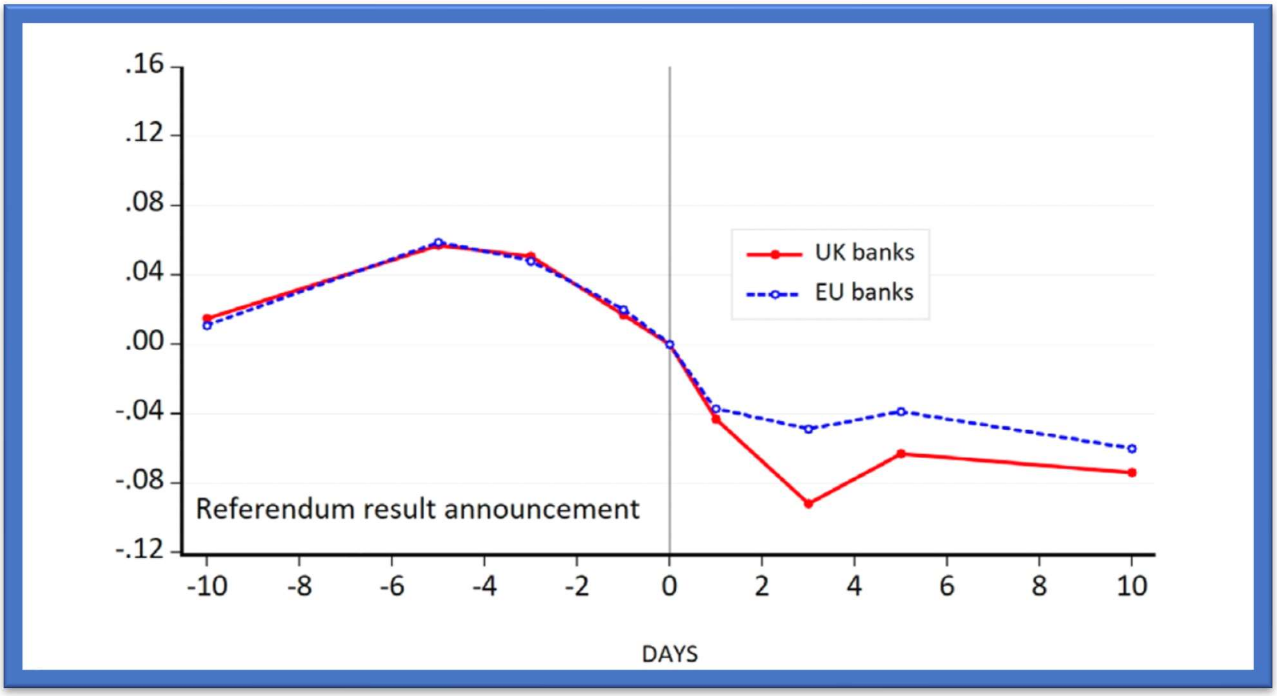

Figure 19: Impact of Referendum on Cumulative Abnormal Returns

Brexit's initial impact on European indices and the UK exit's procedural drag on EU functionality provides a salient historical mapping of populism's deleterious contributions to political instability and market risk. Given that in the days preceding June 23, 2016 (the date of the Brexit referendum vote), "[European] bank shareholders positively priced information on the referendum vote, because "remain" was considered the most likely outcome, the actual referendum outcome ("leave") completely surprised the market."[86] Accordingly, investors incorporated the referendum outcome into price projections, and across the ten days immediately following Brexit, European banks' cumulative abnormal returns (CAR) were -6 percent.[87] The negative cumulative abnormal returns coupled with the broad, sustained declines

[85] Ibid.
[86] "Brexit and the banking sector": https://www.researchgate.net/publication/349990042_Brexit_and_the_Banking_Sector_The_Stock_Market_Reaction_of_UK_and_European_Banks
[87] Ibid, Abnormal Returns: "the difference between their counterfactual stock returns not affected by the information of the three events related to Brexit (expected returns) and their actual returns": https://www.researchgate.net/publication/349990042_Brexit_and_the_Banking_Sector_The_Stock_Market_Reaction_of_UK_and_European_Banks

of the sterling and relevant indices (mainly the .SX7P) demonstrate the short and medium-term quantitative corollaries of successful populist campaigns and the long-term, politically multiform hazards of EU withdrawals.

Scenario 4: Aggressive Bifurcation

Governing Uncertainties

1. Degree of Bifurcation Between the West and Russia-China
2. Extent of Russia-China Cooperation Across Policy Areas
3. Degree of Deglobalization and Continuity of Global Markets

If bifurcation between the West and Russia-China becomes entrenched and encompasses a broad spectrum of policy areas (security, trade, markets, and development), Eurozone banks will confront cross-sectoral market disruptions and decreased investor confidence.

Deglobalization. The fragmentation caused by fully-realized deglobalization contracts global GDP growth and creates downward pressure on Eurozone banks' share prices. The new species of deglobalization "is being driven by powerful autocrats with territorial ambitions and domestic populists who are hostile to global institutions and connections of any sort."[88] The protectionist policies pursued by populist parties and autocrats threaten food security and damage diplomatic relationships between great powers and emerging markets. The degree autocracies succeed in placating their domestic populations will determine the viability of their coercive diplomacy.

Uncoordinated trade policy devastates emerging economies dependent upon exports. There is a real risk for political instability across developed and developing countries as severed economic and diplomatic relationships increase inequality and create fertile electoral environments for populist parties. Eurozone banks' share prices decrease as instability expands at the EU level. Protectionist policy and dysfunctional populist national governments impede fiscal coordination and impact funding distributions. Political destabilization within electorates and the European Commission leads to a chaotic regulatory environment, a fundamental risk for Eurozone banks.

The expansion of aggressive geoeconomic policies.[89] The bifurcation between the West and Russia-China creates spheres of economic influence, while fractures within the Western alliance system contribute to commodity price volatility. Subsequent geopolitical destabilization coupled with resource scarcity introduces aggressive geoeconomic activity where states pursue increasingly aggressive economic and geopolitical instruments (including natural resource extraction) as leverage against the demands of a rules-based international order.[90] Lack of food security across developing economies, particularly in Sub-Saharan Africa and the Middle East, precipitates regional instability and increases the probability of cascading sovereign debt defaults. Eurozone banks face growing market volatility and risk exposure as global regulatory structures fracture.

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[88] Alden, "Anti-globalization": https://foreignpolicy.com/2022/05/03/globalization-deglobalization-inflation-economy-trade-borders/

[89] Chatham House definition of geoeconomics: "The use of economic tools to advance geopolitical objectives—the interplay of international economics, geopolitics and strategy.": https://www.chathamhouse.org/2016/12/geoeconomics-explained

[90] Employing "geoeconomics" within the context of Scenario 4 feasibly allows the scenario to anticipate the potential great power coercion (hard and soft power) and competition (hot and cold conflict) likely surrounding the future pursuit of novel, aggressive economic and geopolitical instruments (including natural resource extraction and bargaining within emerging economies).

Eurozone banks' global financing options diminish as Russia and China expand their spheres of influence to include a growing collection of autocracies and emerging markets. This scenario implication habitat resembles an inter-war period, and the EU pursues wartimes measures, including dividend and stock buyback restrictions, which weaken banks' balance sheets. Finally, world-altering security risks jeopardize global markets and limit banks' merger activity.

Black Swan Event: Gray-zone miscalculation or deliberate attack by China. China attacked Western forces in the South China Sea through miscalculation or a calculated strategic maneuver. Russia supported China, while the Western alliance organized against further belligerence. In the following days, global markets contracted, and the location of the attack disrupted international trade routes. US and EU policymakers express concerns regarding a war with China. The EU implemented liquidity requirements for Eurozone banks, which limited dividend payouts and share buybacks while creating downward pressure on share prices. Because of the threat of war with China and a possible East-West decoupling, investors have questioned the medium-term profitability of Eurozone banks amidst the splintering of global financial markets.

Box 3: Systemic Black Swan Events

In addition to black swan events associated with the causal structures of specific scenarios, the investment strategy should consider systemic black swan events that may upend each scenario simultaneously. The proceeding systemic black swan events would likely precipitate damage across scenarios and introduce catastrophic instability into global markets.
Eurozone banks would likely confront the EU's implementation of new liquidity requirements and dividend restrictions, which would create downward pressure on banks' share prices.

Systemic Black Swan Events:

Russian Gray-zone Test of non-strategic Nuclear Weapons: Russia tested a non-strategic nuclear weapon in a gray-zone area as a coercive demonstration designed to recalibrate West-Russia relations.[91] The West responded with sanctions and missile deployments to the Russian border. Global markets sustained significant, prolonged damage while energy and commodity prices increased. The test destabilized EU politics and regulatory structures. The EU implemented short-term liquidity requirements in response to the Russian test, and the probability of sovereign debt defaults increased as national governments considered the possibility of a nuclear war. Eurozone banks' valuations and share prices fell as investors determined the medium-term response of central banks and the impact of the geopolitical fallout on the banking sector broadly.

Chinese Invasion of Taiwan: China, employing Russia's invasion of Ukraine as a rhetorical pretext, invaded Taiwan. Abandoning "strategic ambiguity," the US upheld its commitment to defend Taiwan militarily.[92] The EU offered limited strategic assistance but implemented sanctions against Chinese corporations to ensure continued security guarantees from the US. International trade

[91] Non-strategic nuclear weapons reference lower-yield, shorter range weapons designed to target positions within a defined battle theatre. Russian declaratory policy may not encompass non-strategic nuclear weapons and Putin may consider "testing" tactical nuclear weapons a viable coercive strategy: https://thebulletin.org/2022/05/potential-us-responses-to-the-russian-use-of-non-strategic-nuclear-weapons-in-ukraine/
[92] In May 2022, President Biden stated that the US would provide military assistance should China invade Taiwan: https://www.nytimes.com/2022/05/23/world/asia/biden-taiwan-china.html?referringSource=articleShare

decreased, and hostilities in the Taiwan Strait disrupted global supply chains, exacerbating energy and commodity price volatility. Global markets incurred lasting damage. Eurozone banks' share prices decreased as investors determined the banks' exposure to Chinese markets. The invasion sundered US and China relations and introduced a high degree of precarity into the geopolitical habitat. The EU pursued decoupling policies against China, destabilizing Eurobanks' growth forecasts and decreasing valuations.

Chapter Five: Forward-Looking Recommendations

The preceding scenario analysis posited four possible futures tethered to the Russia-Ukraine war's outcome. The scenarios considered a broad spectrum of variables that will likely impact institutional investment allocations to Eurozone banks, including, *inter alia*, geopolitical shifts, security developments, EU fiscal policy decisions, domestic political outcomes, and the viability of the rules-based international order.

The analysis provided a simulated environment to stress test an investment strategy predicated on allocations to Eurozone banks. Each scenario's corresponding implications propose possible associated risks and map the surrounding procedural and geopolitical environment. Two foundational questions organize the practical examination of the scenarios and corresponding implications:

1. Does the operative investment strategy (increased allocations to Eurozone banks) possess the fundamental capabilities to perform in each of the four presented plausible futures?
2. How may the operative investment strategy express resilience, respond to shifting futures, evolve to mitigate risk, and convert contingencies into durable opportunities?

Recommendation One

Understand the Salience of Bond Yields and Eurozone Banks' Exposure

Country-specific bond indices "are closely watched indicators for perceived country risk or default risk in emerging markets."[93] The war in Ukraine and the uncertainties surrounding its duration and outcome increased bond yields substantially across emerging markets. The twinning pressures of unsustainable debt service requirements (exacerbated by central banks' interest rate hikes) and rising bond yields create default risk across a broad swath of emerging markets.

[93] German Economic Association, "The Impact of Political Risk on Sovereign Bond Spreads": https://www.econstor.eu/bitstream/10419/19887/1/Moser_revised.pdf

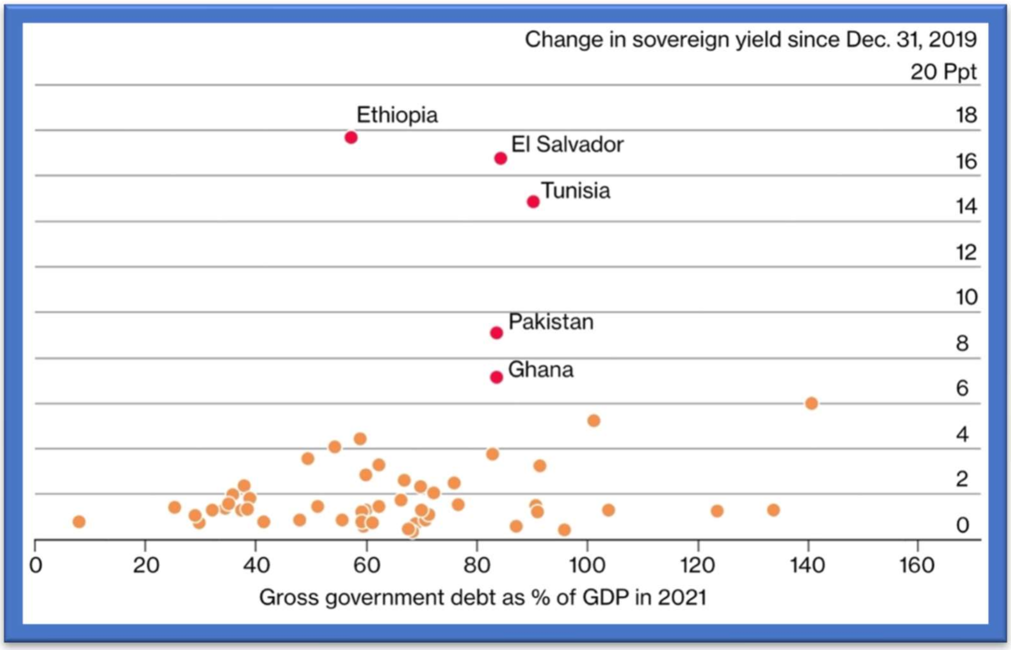

Figure 20: Sovereign Yield Changes in Emerging Markets

Emerging market yield spreads have increased against the US Treasury bonds, indicating systemic instability. Yield spreads represent "the most widely accepted measure of political risk,"[94] Hungary's increased yield spread suggests destabilization within the national government. Hungary's national election (won by Orban) on April 3, 2022, the EU's decision to invoke Article 7's conditionality mechanism (the provision tethers national governments' rule of law behavior to EU funding) against Hungary, and Ursula von der Leyen's subsequent conditionality announcement on April 5, 2022, provide a practical demonstration of bond yields measuring both default risk and political instability over time. This confluence of events impacts bond yields and suggests future risks for Eurozone banks highly exposed to Hungary.

Event	**Date**	**Sovereign Bond Yield**[95]
Markets open following Hungary's national election	April 4, 2022	6.13
Von der Leyen conditionality announcement	April 5, 2022	6.24
	April 6, 2022	6.64
	April 7, 2022	6.68
	April 8, 2022	6.93
	April 11, 2022	7.01

Table 2: Yield Timeline[96]

[94] Bloomberg, Sovereign Yield Changes in Emerging Markets: https://www.bloomberg.com/news/features/2022-04-20/rising-food-energy-prices-are-just-the-start-of-an-emerging-economic-crisis

[95] For reference, Hungary's sovereign bond yield on March 4, 2022 (about a week after the Russian invasion) was 5.56 and on May 13, 2022, the yield was 7.56.

[96] Trading Economics, Hungary Sovereign Bond Yield Increase 4/5/2022 – 5/13/2022

There was a .77 increase in yield from April 5, 2022, to April 11, 2022, and the yield spread against US treasury bonds on April 5, 2022, was 3.69%, and on April 11, 2022, was 4.24%, indicating increased default risk and the possibility of political fragmentation within the national government.

Hungary is a proxy, demonstrating the direct relationship between bond yields (and their spreads against US Treasury bonds) and political risk. The investment strategy of increased allocations

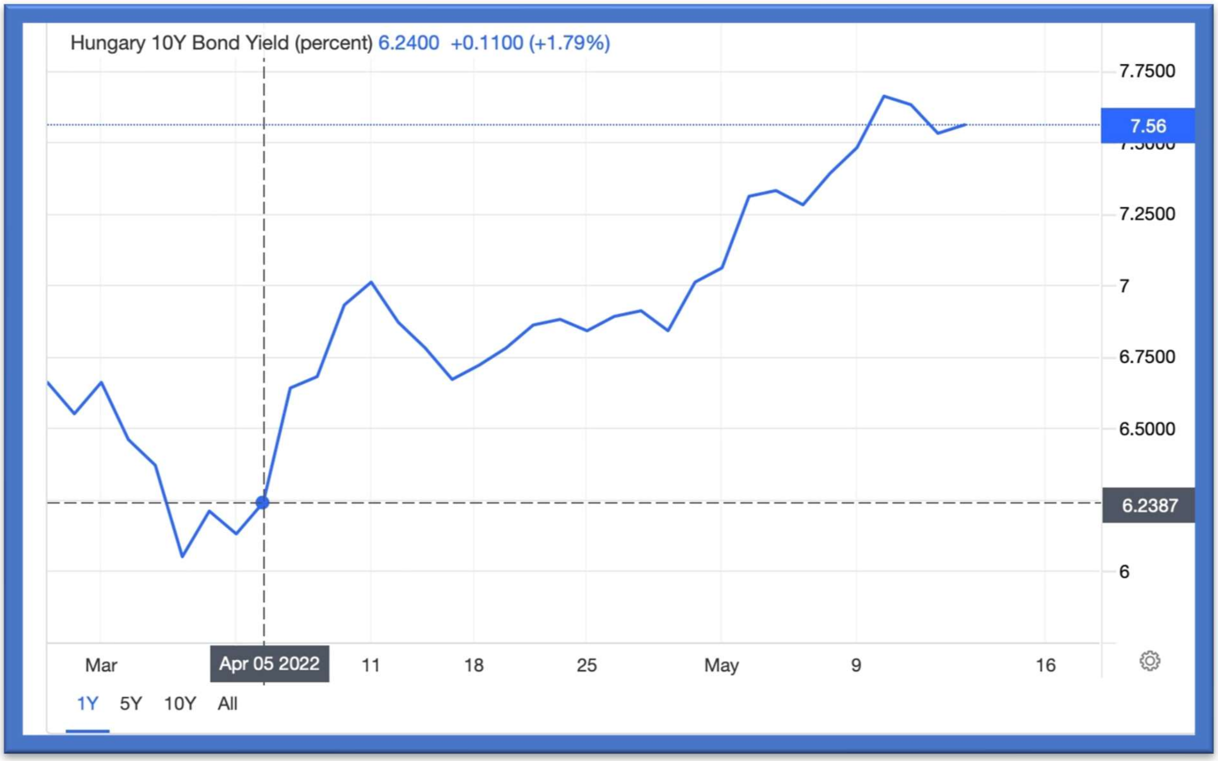

Figure 21: Hungary Sovereign Bond Yield Increase 4/5/2022 – 5/13/2022

to eurozone banks should consistently integrate bond yield data into its tactical decision-making. Specifically, as emerging markets attempt to balance debt service requirements and rising commodity prices, future strategic decisions should consider the linkages between political developments, global security events, and bond yield increases. The strategic risk is that Eurozone banks fail to sufficiently calibrate their risk exposure to emerging market economies. Understanding bond yield behavior and the tethered external determinants will allow the investment strategy to evolve while avoiding potential defaults, increasing valuations, strengthening balance sheets, and buttressing share prices.

Recommendation Two

Confront Deglobalization

Investment strategies should consider the aggregate impact of deglobalization on global markets. As international trade contracts and states impose protectionist tariffs, Eurozone banks' valuations will depend, to a degree, upon the inflationary pressures precipitated by diminished cohesion across sectors. Accordingly, strategies should evolve to accommodate central bank interest-rate increases in response to rising inflation while understanding how national governments' subsidizing of chosen industries (semiconductor and green transition targets) may impact future lending environments.

Export controls and flagrant aggression within the WTO suggest a broader, more entrenched suite of risks for Eurozone banks that investment strategies must balance. Unfettered conflict between large economies may diminish investor confidence and ultimately depress shares, but the broader risk is a more fundamental sundering of great power relations. Investment strategies should prepare for a weakening of the rules-based international order as states contract and employ aggressive geoeconomic tactics to coerce rivals through natural resource administration. Strategies pursuing overweight allocations to Eurozone banks should prepare for a foundational destabilization of global markets and geopolitics, which may reconfigure banks' exposure to emerging market economies. The strategy may limit risk by ensuring that the sector balances its exposure to national governments with high political fragmentation and increased default risk.

Recommendation Three

Broadened Conception of Strategic Autonomy

In a cohesive macroeconomic and geopolitical environment driven by the EU's more expansive conception of strategic autonomy, investment strategies should pursue corresponding advantages. Moreover, the EU's broadened definition of strategic autonomy may present a spectrum of lending opportunities as the Union aggressively facilitates the green transition through innovation incentives directed at private firms.

The overall stability provided by a multifaceted conception of strategic autonomy supports increasing share prices. Aggressive investment strategies, which broadly increase allocations to the banking sector, succeed as a prolonged period of stabilized geopolitics buoys global markets. The prioritization of implementing strategic autonomy across policy areas should engender an SGP resolution and define the spending parameters of national governments. Strategies should focus on increasing allocations across the banking sector and anticipating the opportunities presented by predictable regulatory environments underpinned by a functioning SGP.

A fully realized expression of strategic autonomy will dynamize EU cohesion surrounding Ukraine's reconstruction. Eurozone banks may enter public-private partnerships to finance reconstruction efforts in Ukraine. Investment strategies should pursue the opportunities inherent to financing reconstruction efforts while monitoring the regulation of Ukraine's private markets to ensure the absence of corruption.

Recommendation Four

Food Security and Global Markets

Investment strategies should consider the degree of bank exposure to emerging markets and understand the impact of the global food crisis on political stability. Ukraine and Russia "supply 28% of globally traded wheat, 29% of the barley, 15% of maize and 75% of the sunflower oil."[97] Mined Ukrainian waters off its southern coast and the Russian blockade of the port of Odesa impede the distribution of commodities.

The disruption in supply precipitates political unrest in developing countries and represents a consistent risk to Eurozone bank profitability. Strategies must consider the duration of the blockade and the broad political impact of food shortages when determining investment allocations. For emerging

[97] The Economist, May 2022.

markets, food security issues will compound the current extremities of unsustainable debt service requirements and rising energy prices. In addition, investment strategies should prepare for increased bank exposure to emergent political instability. A destabilized political environment across emerging markets will introduce precarity into regulatory environments, jeopardizing the balance sheets of exposed banks. Strategies must monitor the legislative and judicial atmosphere and anticipate future shocks that may damage banks' asset quality.

Stringent export controls may increase geopolitical and diplomatic tension. Investment strategies should prepare for regional instability and trade disputes between great powers (driven by protectionist positions). Strategies should recognize aggressive geoeconomic tactics and understand how natural resource administration may impact commodity markets. Finally, strategies must prepare for the expansion of Western sanctions against Russia and the impact of increased coercive pressure on food distribution and global markets.

Given the entrenched uncertainty surrounding the Russian-Ukraine war's resolution, investment strategies will benefit from balancing the various sub-determinants (bond yield spreads, cross-categorical EU cohesion, dysfunctional trade environments, and reduced food distribution capacity) that inform each corresponding recommendation against the overarching geopolitical, macroeconomic, and security realities. Ultimately, the multi-tier complexities (expressed across thematic domains) that organize the emergent postwar system will determine the practical degrees of risk as central banks adapt to shifting market conditions and the rules-based international order begins to manifest the lineaments of increasingly aggressive great power competition.