On November 21-22, 2024, De Nederlandsche Bank organized its 27th Annual Research Conference. The conference theme was "*The Macroeconomic Effects of Geopolitical Uncertainty*". The event featured two keynote speeches by Pierre-Olivier Gourinchas and Sydney C. Ludvigson, a policy panel discussion with Pierre-Olivier Gourinchas and Philip Lane, and the presentation of eight high-quality research papers.

Klaas Knot opened the conference with a thought-provoking speech on the impact of geopolitical tensions on the global economy. Reflecting on lessons from European history, he emphasized that integration and cooperation are essential for sustaining peace, democracy, and prosperity. While globalization fosters interdependence, recent trends toward protectionism and rising geopolitical tensions pose significant economic challenges. He outlined four key areas where geopolitical tensions affect economic outcomes: corporate investment, household consumption, trade, and financial stability. He highlighted the importance of coordinated fiscal and monetary policy responses, citing the EU's strategies during the COVID-19 pandemic and the Ukraine crisis as examples. Additionally, he advocated for long-term strategies to mitigate geopolitical risks, including strengthening supply chains, adopting strategic trade policies, and enhancing financial stability frameworks. Concluding his remarks, Knot called for continued research into the measurement of geopolitical risks and their economic implications. He stressed the need for international cooperation to effectively tackle global challenges and foster resilience in the face of uncertainty.

The first session focused on the macroeconomic effects of fragmentation. **Dongho Song (Johns Hopkins Carey Business School)** presented a study exploring the rise of global geopolitical fragmentation and its economic consequences. Using a dynamic factor model, the study measures fragmentation through various indicators and reveals its detrimental impact on global economies, particularly in emerging markets. Fragmentation hampers growth, trade, and innovation, with its negative effects manifesting rapidly, in contrast to the slower emergence of globalization's benefits. The study also underscores varying impacts across geopolitical blocs, highlighting the need for policies that address fragmentation to support economic resilience.

Banu Demir (Oxford and Bilkent University) explored the economic impact of geopolitical sanctions, focusing on Turkish exports to Russia following Western sanctions imposed after the invasion of Ukraine. Her findings revealed significant trade diversion, with Turkish firms increasing exports, raising prices, and shifting to Turkish lira invoicing. Payment risks led to a rise in cash-in-advance transactions. Firms with Western ties reduced trade with Russian, citing reputational concerns and the risk of sanctions. The study sheds light on the strategic and economic implications of sanctions on global trade dynamics.

In his keynote address, **Pierre-Olivier Gourinchas (International Monetary Fund)** discussed the economic effects of geopolitical uncertainty and fragmentation. He highlighted the decline in trade, FDI, and financial flows between geopolitical blocs since Russia's invasion of Ukraine, drawing parallels to patterns observed during the Cold War. He also noted the rising importance of nonaligned "connector" countries, which help maintain trade flows but fail to mitigate strategic dependencies. Fragmentation also disrupts supply chains, exacerbates external imbalances, and hinders global goals such as climate targets. He emphasized that strategic policies and geopolitical alignments remain crucial in navigating these challenges.

The second session focused on the economic implications of geopolitical risks. **Gernot J. Müller (University of Tübingen)** presented a study investigating the economic consequences of interstate wars over 150 years, encompassing more than 60 countries. The findings reveal that wars lead to substantial economic downturns in both the directly involved countries and their neighbours, driven by negative spillover effects. These spillovers create adverse supply shocks, posing significant challenges for stabilization policies. The contraction in supply caused by war tends to be more persistent, suggesting that monetary policymakers often cannot simply "look through" such shocks.

Dario Caldara (Federal Reserve Board) examined the impact of geopolitical risks on inflation across 44 economies spanning the period since 1900. The study reveals that geopolitical risks raise inflation, with effects varying across countries and periods. This leads to reduced economic activity, increased military spending, rising debt levels, and supply disruptions. The study confirms that

geopolitical risks increase inflation, with rising commodity prices and currency depreciation outweighing deflationary effects.

The first day of the conference concluded with a policy panel featuring **Pierre-Olivier Gourinchas (International Monetary Fund)** and **Philip Lane (European Central Bank),** moderated by **Olaf Sleijpen (DNB)**. During the discussion, Gourinchas addressed the macroeconomic effects of geopolitical uncertainty, focusing on the recent surge in geopolitical risks and their effects on supply chains, oil prices, and shipping costs. He presented scenarios illustrating how geopolitical tensions affect global growth and inflation, emphasizing the potential for financial fragmentation and its broader implications for the global economy. Lane talked about the fragmentation of the global trading system, driven by domestic policies and geopolitical dynamics. He highlighted selective decoupling, particularly within the Western bloc, where imports of advanced technologies and green transition products from China have declined. Lane also addressed firms' de-risking strategies, such as EU-shoring, to mitigate exposure to high-risk countries. He outlined different trade fragmentation scenarios and underscored the importance of central banks closely monitoring these developments to navigate the changing global trade landscape effectively.

The second day started with a session on geopolitical tensions and their impact on firms. **Jenny Chan (Bank of England)** explored how trade fragmentation influences inflation and monetary policy, using an open-economy model that accounts for imperfect international risk-sharing. Her findings reveal that the inflationary effects of trade fragmentation are complex, depending on how aggregate demand responds to reduced real incomes and productivity. The study emphasized that the macroeconomic outcomes and appropriate monetary policy responses to fragmentation are shaped by household heterogeneity and the degree of economic openness.

Adam Hal Spencer (University of Bonn) examined the dynamic effects of industrial policies amid geoeconomic tensions, employing a two-country open-economy model. The paper analyses the impacts of import tariffs, offshoring frictions, production subsidies, and entry subsidies. It finds that while some policies may reduce wage inequality in the short term, they often result in long-term welfare losses. Myopic policymakers tend to favour subsidizing domestic production, whereas forward-looking ones lean towards imposing tariffs, with differing consequences for overall welfare.

In her keynote speech, **Sydney Ludvigson (New York University)** explored the impact of geopolitical risks on financial markets, focusing on how uncertainties influence asset prices, market volatility, and investor behaviour. She highlighted how geopolitical events drive fluctuations in financial markets, shifting risk sentiment and prompting changes in investor strategies. She underscored the need for policymakers and financial institutions to deepen their understanding of these dynamics, as they play a critical role in maintaining economic stability and responding effectively to geopolitical tensions.

The fourth and final session of the conference dealt with the heterogeneous effects of geopolitical risks. **Jetro Anttonen (Bank of Finland)** analysed the transmission channels of geopolitical events, focusing on the Israel-Hamas conflict and the Ukraine war, and their effects on Euro Area macroeconomic aggregates. He found that the Ukraine war was inflationary, while the Israel-Hamas conflict had deflationary effects. He concluded that these geopolitical risk shocks are transmitted primarily through demand factors.

Alessandro Franconi (University of Pavia) explored the impact of geopolitical risk on the effectiveness of U.S. monetary policy. Using a nonlinear Proxy VAR model and the Geopolitical Risk index, the author found that monetary policy becomes less effective during periods of high geopolitical risk. A contractionary shock initially has expansionary effects, with muted impacts on output, prices, and credit spreads. Additionally, defence spending is less responsive to monetary shocks during times of geopolitical tension. This mechanism is quantitatively important for understanding the state-dependent effects on policy transmission.