

Geopolitics

BBVA Research Big Data Geopolitics Monitor

Big Data Unit 23 April 2024

Israel's response was contained, but markets reacted more intensively last week. Some of our Economic Political Uncertainty indexes reacted

Iran downplayed the attack, but highlighted Israel ability to evade Iran Air defense: an Israeli airstrike on Iran on Friday damaged an air defense system, according to Western and Iranian officials, in an attack calculated to deliver a message that Israel could bypass Iran's defensive systems undetected and paralyze them (NYtimes). The Israel Head of Intelligence resigns (Fig 2). The Head of Military Israeli Intelligence on security failures the Hamas attack.

Pro Palestinian Protests increased in the US: the Columbia University decided to hold class virtually after Pro-Palestinian protests increased in New York Campus. Pro Palestinian protests have increased in several universities as the US rushed to aid Israel amid tensions with Iran (WSJ).

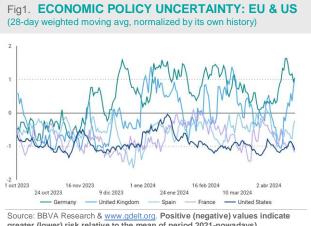
US Passed The Ukraine Bill reinforcing Ukrainian military power: The US House of Representatives has approved over \$60bn in military aid for Ukraine in its fight against Russia, after months of inaction. The Ukraine aid was part of a \$95bn package of national security bills including also \$26bn for Israel. (FT).

US Presidential Elections: Trump trial enters final stage while polls continue to show a tough race.

The BBVA Monitor: Some Economic Policy Uncertainty indexes react to Iran-Israel disputes

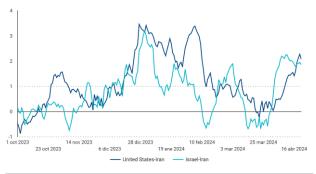
The increasing tensions in the Middle East raised uncertainties in the markets and the economic policy uncertainty indicators reacted increasing sharply during the week in some developed markets:

- The levels of Geopolitical risk, Conflict and Political Tensions remained high in the Middle East, but contained with respect to the previous week (Fig 2, Fig 3 and Fig 5). Nonetheless, the economic policy indicators started to increase significantly during the week, reaching the high-risk area in some developed countries such as Germany and UK and, to a lesser extent, in Spain (Fig 1 and Fig 3). On the contrary, the economic policy uncertainty decreased in France and the US, entering in the low risk area.
- In the case of Latam, Geopolitical risk indicators increased in Ecuador, which is in the high risk area since the increasing tensions given the Mexico's embassy incident in the previous weeks. The indicator increased too in Colombia, but close to the neutral area. On the other hand, the geopolitical sentiment risk decreased in Mexico and Argentina (Fig 3 and Fig 4).



greater (lower) risk relative to the mean of period 2021-nowadays)

Fig2. BILATERAL TENSIONS: USA-IRN & ISR-IRN (28-day weighted moving avg, normalized by its own history)



Source: BBVA Research & www.gdelt.org. Positive (negative) values indicate greater (lower) risk relative to the mean of period 2021-nowadays)

*The selection of news has been enriched by the BBVA Research Geo Assistant developed with Chat-GPT.

Conflict



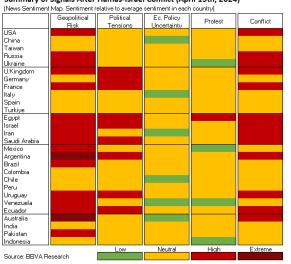
Fig3. BBVA RESEARCH GEOPOLITICS MONITOR "SIGNAL" CHANGES

(Signals in Geopolitical Risk, Political Tensions, Economic Policy Uncertainties, Protest and Conflict according to Standard Dev)

(News Sen

BBVA Research Geopolitics Monitor main "Signal" changes after the Hamas-Israel Conflict

Summary of Signals After Hamas-Israel Conflict (April 15th, 2024) nt Ma



USA China Taiwan Russia Ukraine U.Kingdom Germar France Italy Spain Turkiya Egypt Israel Iran Saudi Arabi Mexico Argentina Brazil Colombia Chile Peru Peru Uruguay Venezuela Ecuador Australia India Pakistan Indonesia Indonesia Neutral Source: BBVA Research

Summary of Signals After Hamas-Israel Conflict (April 22nd, 2024)

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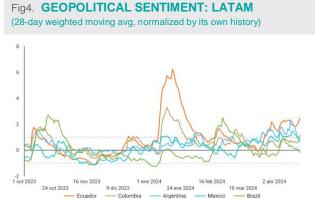
Protest

Sentin

Geopolitical

Risk

Source: BBVA Research and www.gdelt.org



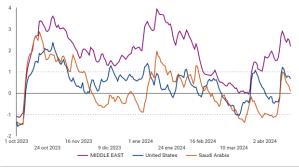
Source: BBVA Research & www.gdelt.org. Positive (negative) values indicate greater (lower) risk relative to the mean of period 2021-nowadays)

(Evolution of Protest and Conflict over time by regions)

Fig6. BBVA RESEARCH PROTEST AND CONFLICT HEAT MAPS

Fig5. GEOPOLITICAL RISK: ME, US & SAUDI ARABIA

(28-day weighted moving avg, normalized by its own history)



Source: BBVA Research & www.gdelt.org. Positive (negative) values indicate greater (lower) risk relative to the mean of period 2021-nowadays)

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Source: BBVA Research and www.gdelt.org



Methodological annex: indicators' construction

We have developed a daily tracker with weekly updates to monitor protest and conflict indicators for every country in the world from 2019 to present day. To construct this, we use a rich 'big database' of international events (GDELT), created by Leetaru and Schrodt (2013). GDELT is an open-source database which extracts and parses digital news monitoring world events covered by news media from nearly every corner of the world, whether broadcast, printed or published on the web, in over 100 languages, every moment of every day, updated every 15 minutes. Thus, it contains a comprehensive and high resolution catalog of geo-referenced events and themes.

Using different dictionaries, several thousands of taxonomies and themes are identified in the news pieces to classify the information. The algorithms used by GDELT also identify emotions, organizations, locations, news sources and events across the world as well as their average sentiment using Natural Language Processing (NLP) techniques and the lexicon approach.

The included indicators are:

- Geopolitical Risk: or sentiment (weighted by coverage) of the country's geopolitical risk perception.
- Political Tensions: or sentiment (weighted by coverage) of the country's political tensions.

- Economic Policy Uncertainty or sentiment (weighted by coverage) about the country's economic policy uncertainty, also disaggregated by media origin.

- Protests or coverage regarding social protests or unrest in the country.
- Conflict or coverage of armed conflicts, which go beyond verbal protests.

- Bilateral Tensions or the sentiment (weighted by coverage) between a specific pair of countries that appear together in the news article (plus NATO and EU).

The indicators track the evolution of tensions and are normalised by its own country history since 2019, thus they are all expressed in terms of standard deviations from their historical patterns. Indicators usually lie within the range [-1,1]. Therefore, when the values exceed one (the upper boundary of the range), this means escalating tensions. While it's possible to observe simultaneous tensions arising in multiple countries (for example, due to geopolitical events affecting several nations, as seen in some of our heatmaps), using these indicators for direct quantitative comparisons of risk levels between countries is not recommended.

We apply a weighted moving average of 28 days (to include four complete weeks with the same number of days of the weeks) to reduce noise of daily information and identify signals more clearly. The weights have been calculated using a discrete geometric distribution such that it puts more weight on recent data and less on past data (see Graph 1). Aggregating by weeks, the weight of the most recent week has a weight of 68%, the past week 22%, the previous 7% and the fourth 3%. The weight of the 28 days can be seen in the following image. In such a way, the indicators reflect what is happening in the last days.



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