

Geopolitics BBVA Research Big Data Geopolitics Monitor

Big Data Unit 29 January 2025

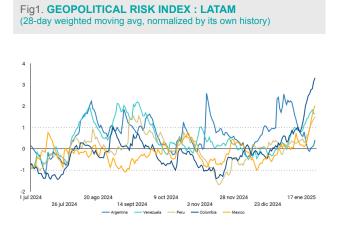
China takes a major leap forward in the global AI race despite US export control. EU to fast-track Ukraine membership bid in 2025

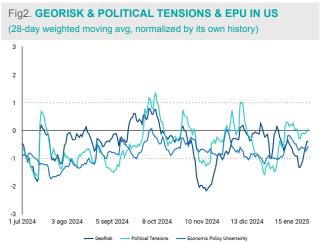
China takes a major leap forward in the global AI race...despite US export controls: China's DeepSeek-R1, a LLM developed by start-up DeepSeek, has captured global attention with its capacity to match OpenAI's o1 in complex tasks such as chemistry, mathematics and coding. Unlike many Western-built models, R1 is released under an 'open-weight' framework that allows researchers to study and adapt its algorithm, though not entirely open source due to undisclosed training data. The success of DeepSeek-R1 underscores China's rapidly advancing AI capabilities, even in the face of US export controls that restrict access to high-end semiconductors. The firm managed to train the model at a fraction of the cost of Western equivalents, attributing its efficiency to creative algorithms and a 'mixture-of-experts' architecture. With experts noting that the United States' perceived technological lead may have narrowed significantly, the emergence of DeepSeek-R1 challenges the notion that AI dominance is determined primarily by access to powerful computing resources (<u>Nature</u>).

EU aims to fast-track Ukraine membership bid in 2025: The EU plans to expedite Ukraine's accession by opening two negotiation clusters in the first half of the year, marking a significant step toward what could become the EU's largest expansion in over two decades. While Ukraine and Moldova have both initiated membership procedures, Kyiv has yet to begin its first negotiating cluster despite having the legal green light to do so. EU Enlargement Commissioner Marta Kos stressed that further progress depends on unanimous approval by existing member states, with Hungary in particular posing resistance.

The BBVA Monitor: geopolitical risk and conflict intensity indices raised in LATAM over the week

- Geopolitical tensions, driven by U.S. tariff threats, as well as increasing tensions at the Mexican border, are raising geopolitical risk, conflict intensity indicators, and the Economic Policy Index in Colombia and Mexico. The resurgence of guerrilla activities along the Venezuelan border is also contributing to rising indicators in both Colombia and Venezuela. Geopolitical risk has likewise increased in other Latin American countries, such as Uruguay and Peru. (Fig.1, Fig. 3, Fig. 4 and Fig. 5).
- Geopolitical tensions indicators rose in the US given the emergence of DeepSeek-R1 (Fig. 2 and Fig. 3).





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

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

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Fig3. BBVA RESEARCH GEOPOLITICS MONITOR "SIGNAL" CHANGES

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

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

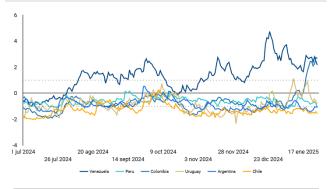
Summary of Signals After Hamas-Israel Conflict January 21st, 2025)



Source: BBVA Research and www.gdelt.org.

Fig4. POLITICAL TENSIONS INDEX: LATAM





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

Summary of Signals After Hamas-Israel Conflict January 28th, 2025) to average senti Ec. Policy Conflict Geopolitical Risk Political Tensions Protest Uncertainty USA China Taiwar Russia Ukraine U.Kingdor Germany France Italy Spain Turkiye Egypt Israel Iran Saudi Arabi Mexico Argentina Brazil Colombia Chile Peru Uruguay Venezuela Ecuador Australia India Pakistar Indonesia Source: BBVA Research

Fig5. CONFLICT INDEX: CO & VE & MX

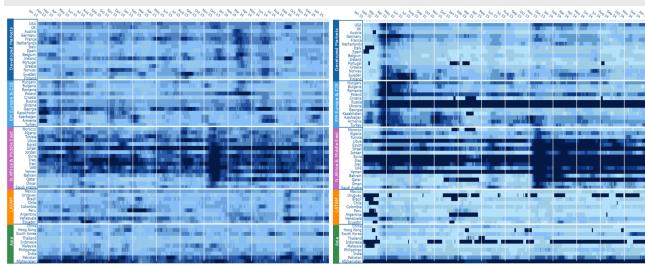




Source: BBVA Research & <u>www.gdelt.org</u>. Positive (negative) values indicate greater (lower) risk relative to the mean of period 2021-nowadays)

Fig6. BBVA RESEARCH PROTEST AND CONFLICT HEAT MAPS

(Evolution of Protest and Conflict over time by regions)



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 that 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 normalized by their country's 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 the 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 has been happening in the last few days.



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