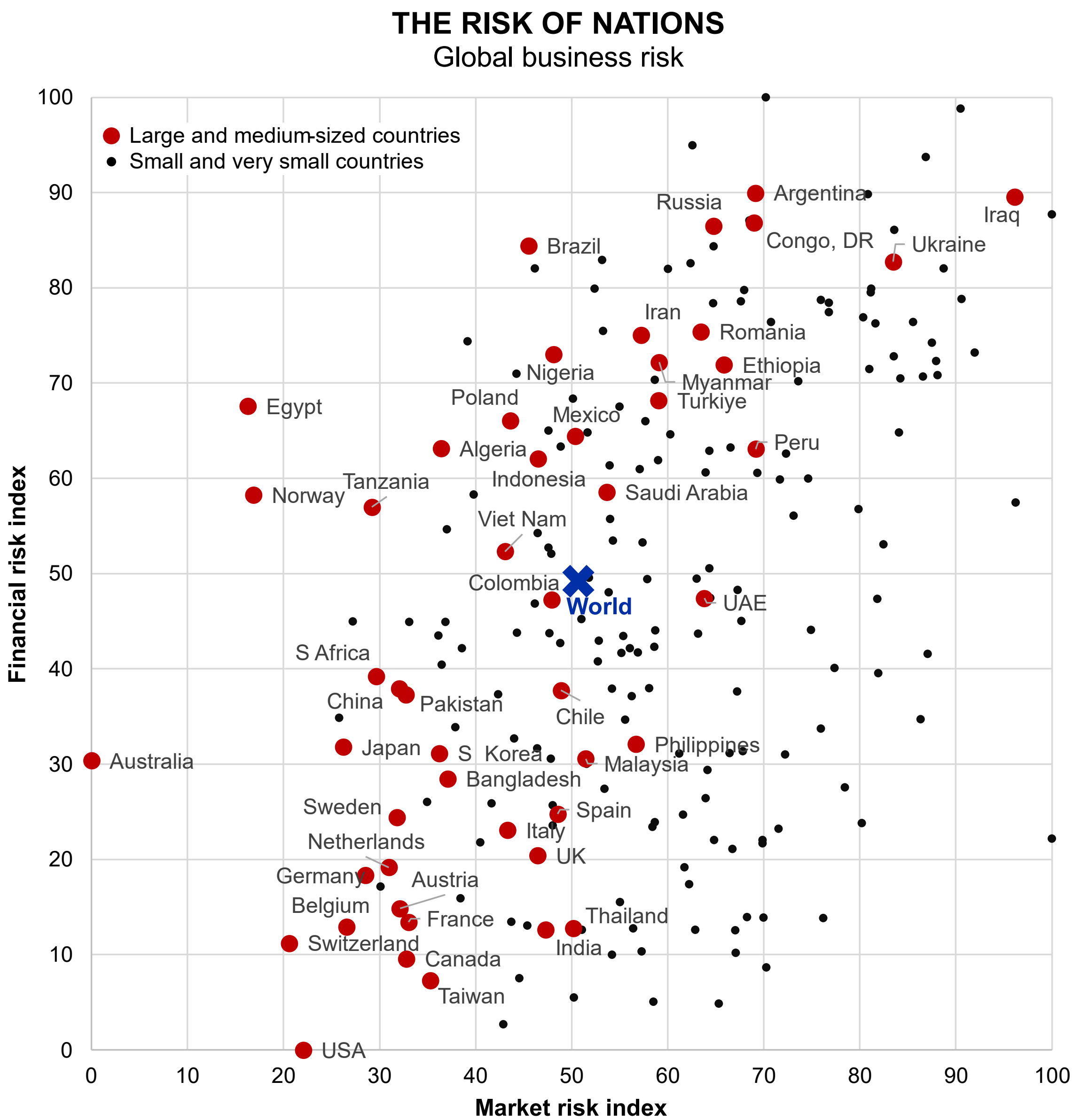
THE RISK OF NATIONS

How should we look at country risk? We present the risk of nations based on a quantitative analysis.[1] We divide risk into financial and market (demand) components.

Looking at risk this way gives a strict definition to what is meant by risk. It is in line with Frank Knight's observation[2]: Risk is a knowable probability distribution.



Source: TelluBase; Tellusant analysis

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METHOD

The analysis takes a fraction of the effort to generate compared to the qualitative risk assessments seen elsewhere.

1. **Country risk** is measured by looking at the volatility in GDP, inflation, and exchange rates over 40 years, with more recent data being more important.
2. **Principal Component Analysis (PCA)** shows that these three factors are closely related and can be simplified into two main dimensions, capturing most of the information.
3. Thes two dimensions are called **market risk** (mainly affected by GDP volatility) and **financial risk** (mainly affected by exchange rate volatility), with inflation affecting both.
4. The data is processed and scaled so that the risk ranges from 0 to 100.
5. The results are shown in the graph. They are easier to understand because they are shown in two dimensions instead of three, making it simpler to compare countries.

Technically, the standard deviation (with a transformation to avoid right-side skew) over 40 years is used. Recent years are more heavily weighted than ancient years. This creates three risk dimensions. These three dimensions are transformed to achieve normality (boxcox).

The PCA is performed, resulting in two orthogonal dimensions, then rotated. The two dimensions capture 91% of the information content. (One dimension captures 66%.)

OBSERVATIONS

- The United States has the lowest risk level. The size of the economy and the dollar being the world currency creates stability.
- EU countries tend to have low market risk. Financial risk is higher than for the US.
- Australia has had stable economic growth for decades and is the least risky market.
- On the high-risk side, Iraq, Russia and Argentina shine. No surprise in this.
- China and India have moderately low risk levels. This has, and will likely continue to have, positive implications for their economies.
- The unnamed dots in the lower right corner are mainly Caribbean islands with currencies pegged to the U.S. dollar.

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[1] Qualitative assessments include political risk, corruption risk, and others. They all translate into the quantitative measure presented here.
[2] Frank Knight (1921): *Risk, Uncertainty and Profits*