A sure bet!

The Franklin Political Risk and Opportunity Index (FRISKOP)

Oliver Strijbis

Franklin University Switzerland

1. The Franklin Political Risk and Opportunities Index (1)

Concept:

- Political risk = Probability of events * macroeconomic impact
- Impact:
  - Effect on global political economy
  - Measured with expert survey: Randomized pairwise comparisons of geopolitical events on their potential impact on global economy
- Probability => Political event forecasting with prediction market
- FRISKOP is the first available index that fully quantifies both the likelihood of geopolitical events and its potential economic impact

1. The Franklin Political Risk and Opportunities Index (2)

Political risks for the global economy until July 31, 2024

Event	Probability	Impact	Risk
Collapse of Israeli government	27%	Very Negative	High Risk
Another absolute majority for the BJP	52%	Negative	High Risk
Violent riots in major US city	16%	Very Negative	Moderate Risk
According to this scenario at least two incidences of distinct, continuous and violent action directed toward members of a distinct "other" group or government authorities take place. The participants intend to cause physical injury and/or property damage. At least 100 individuals are involved in at least two of the events and at least ten individuals insured.			
Chinese sea blockade	13%	Very Negative	Moderate Risk
Republicans have decisive lead in polls	11%	Very Negative	Moderate Risk
Terrorist attack in the US	10%	Very Negative	Low Risk
Identity and Democracy 2nd group in EP	8%	Very Negative	Low Risk
China attacks Taiwan	5%	Very Negative	Low Risk
Full blockage of Suez Canal	4%	Very Negative	Low Risk
Russia detonates nuclear device	4%	Very Negative	Low Risk
Flemish nationalists win 1/3 of all seats	15%	Negative	Low Risk
Collapse of government in Spain	9%	Negative	Low Risk
Argentina to default	6%	Negative	Low Risk
Collapse of German coalition government	4%	Negative	Low Risk
Pakistan to default	2%	Negative	Low Risk
Big win of Morena in Mexican elections	32%	Minor	Minimal
Italian government instability	13%	Minor	Minimal
Ceasefire between Russia and Ukraine	8%	Positive	Minimal
Putin replaced by anti-war government	2%	Positive	Minimal
US-EU agreement on critical materials	11%	Positive	Opportunity

2. Political event forecasting with prediction market (1)

How accurate are forecasts from prediction markets?

- Prediction markets as financial markets designed to use the information contained in market prices to make predictions about certain future events
- Aggregator based on the ‘wisdom of crowds’ logic (Galton 1907, Surowiecki 2005)
- A group of Nobel Laureates and established economists: One of the most promising forecasting methods (Arrow et al., 2008)
- Highly accurate for US presidential elections, most accurate method in predicting election outcomes in Europe (Graefe 2016)
- Successful application to replication studies in social and behavioral science (Gordon et al. 2021) and migration movements (Morgenstern and Strijbis, under review), among others
- But how accurate for geopolitical events?

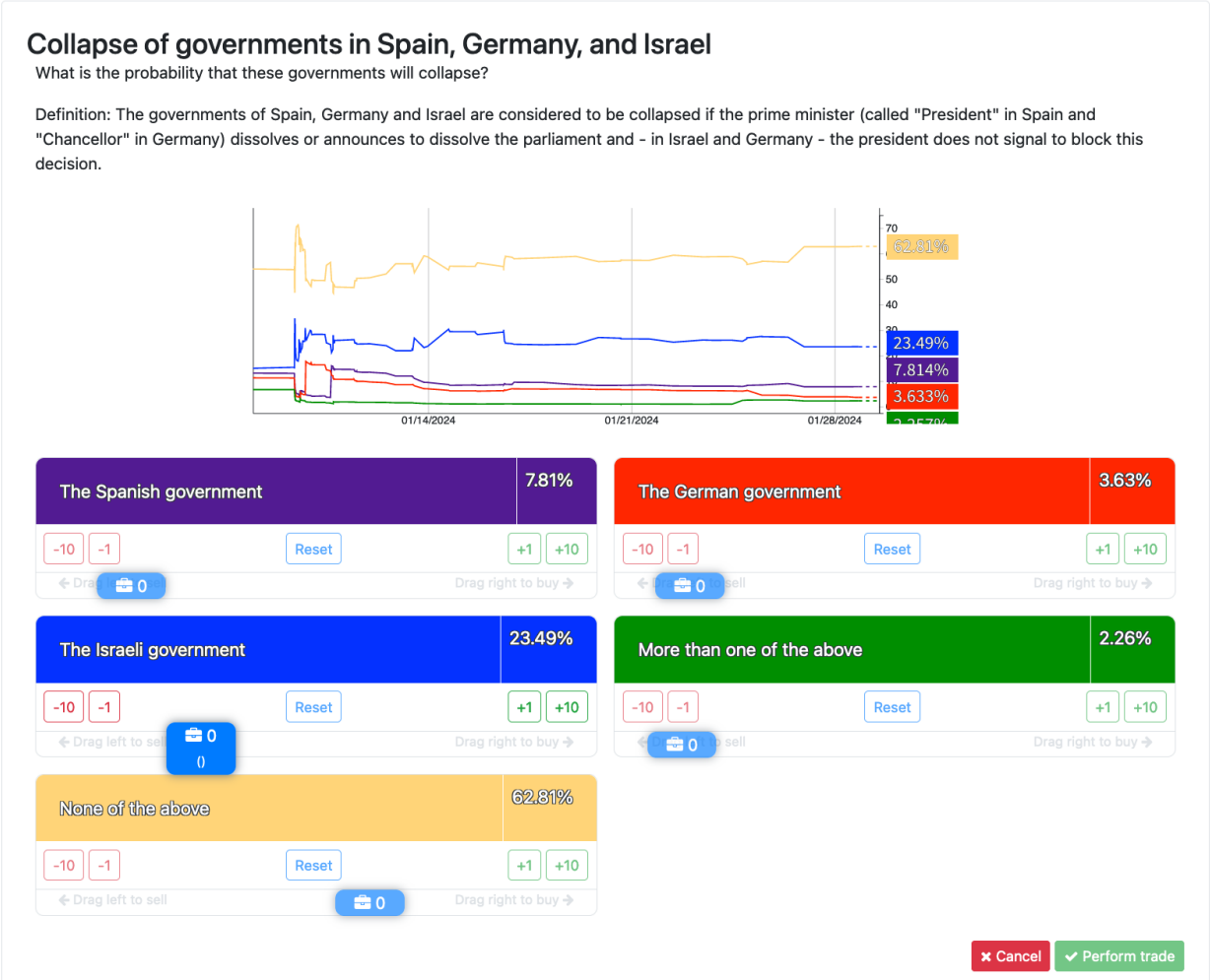
2. Political event forecasting with prediction market (2)

A real money probability market on geopolitical events:

- Step-by-step:
  - Step 1: Define question (e.g. When will the US raise its debt ceiling?)
  - Step 2: Set starting prices (e.g. 50 $ for the share ”Between June and July”)
  - Step 3: Participants trade shares (e.g. buy ”Between June and July” share traded at price of 60 $)
  - Step 4: Set final price so that 100 $ if event happens (e.g. ”Between June and July”), 0 $ if not
- If risk neutral: Price is equivalent to expected probability that the event happens!
- The prices of stocks ≈ expected probability that event takes place
- Real money: participants get 10€ starting capital

2. Political event forecasting with prediction market (3)

Example: Trading probabilities of the collapse of governments



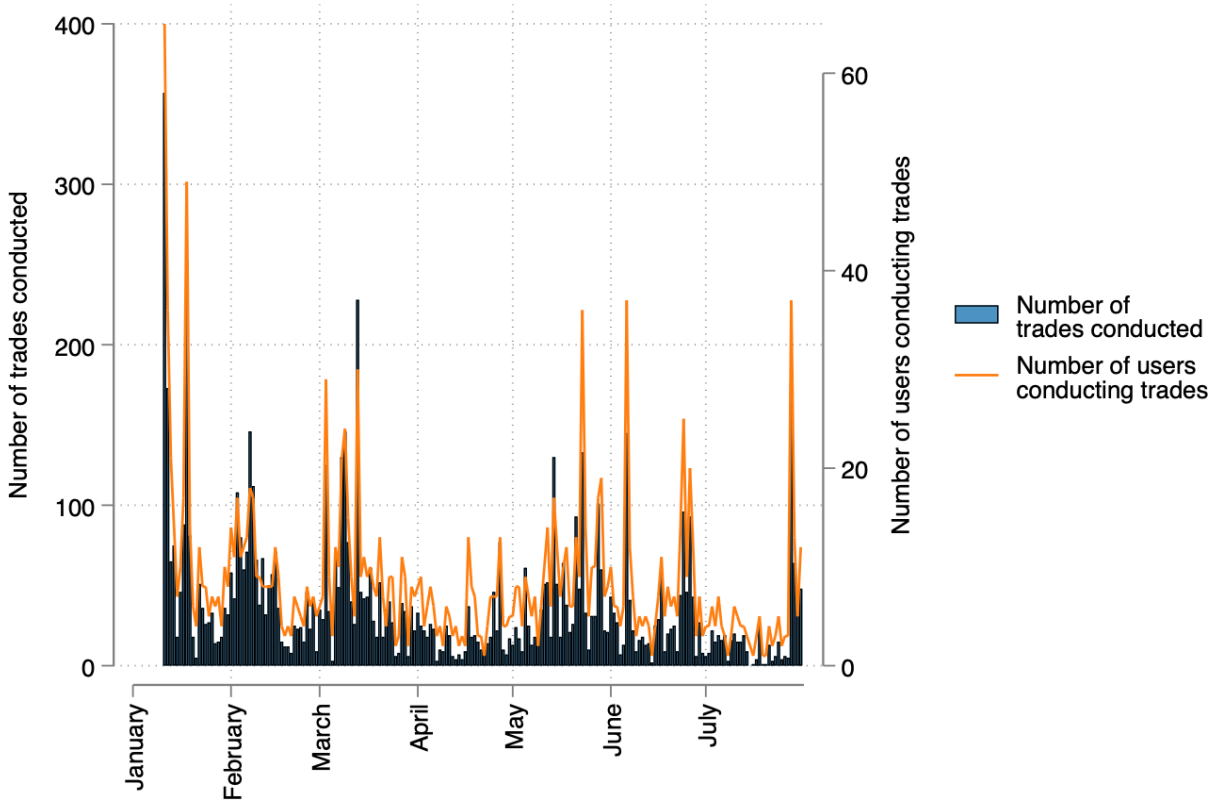
2. Political event forecasting with prediction market (4)

The geopolitical market for geopolitical risks in first halve 2023:

- Own prediction market platform (thepredictionmarket.com)
- Selection of questions (“case selection”):
  - Economic harm estimates by experts
  - Questions covered by forecasting polls (Metaculus, Good Judgement Open)
- Participants from own panel (typically students recruited for election forecasts in Germany, Spain and Switzerland)

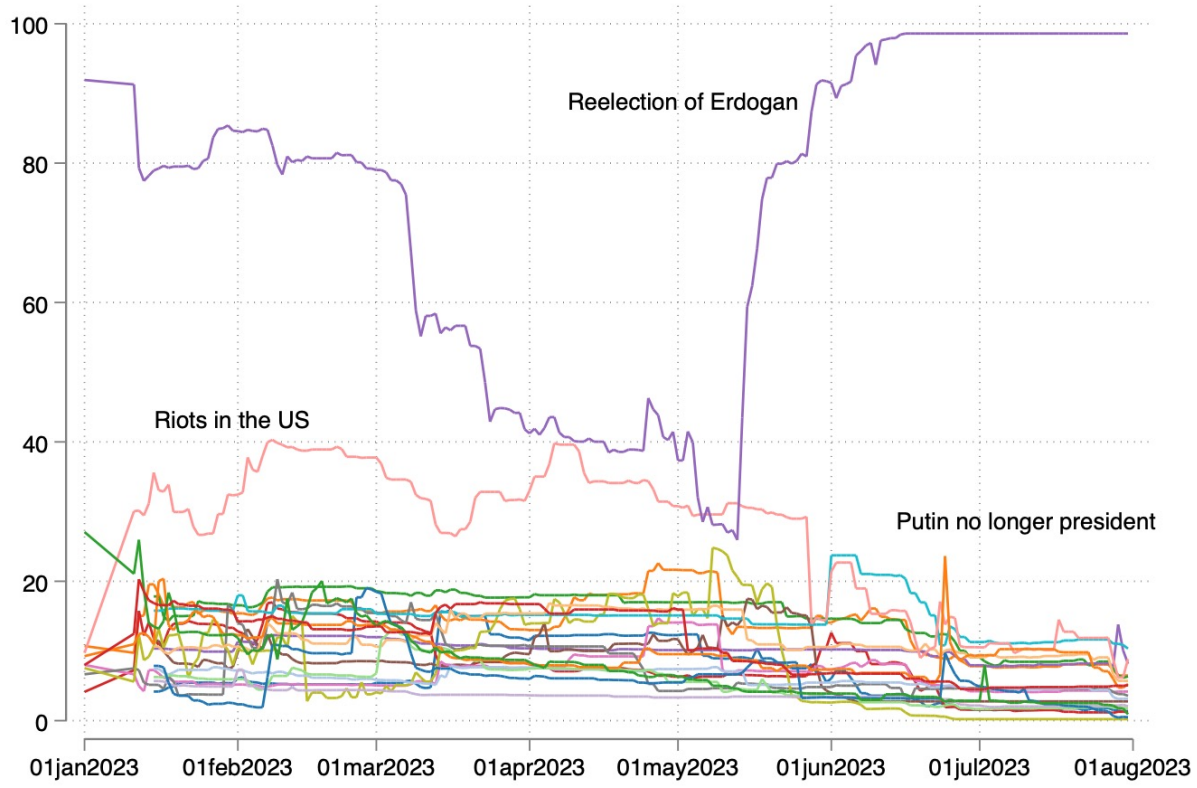
2. Political event forecasting with prediction market (5)

Figure: Participation and trading activity



2. Political event forecasting with prediction market (6)

Figure: Time series forecasts



2. Political event forecasting with prediction market (7)

Table: Comparison of prediction market with forecasting polls

Event	Date of forecast	Prediction market	Prediction polls[12]	Outcome	Difference in accuracy
Debt ceiling not extended[1]	January 31	3%	12%	0%	9%
Khamenei no longer leader[1]	January 31	4%	16%	0%	12%
Debt ceiling not extended[2]	April 26	9%	8%	0%	-1%
Nuklear strike by Russia[1]	January 31	10%	16%	0%	6%
Russia - Ukraine ceasefire[1]	January 31	11%	12%	0%	1%
China attacks Taiwan[1]	January 31	13%	5%	0%	-8%
Riots in the US[2]	March 20	19%	29%	0%	10%
Putin no longer president[1]	January 31	20%	12%	0%	-8%
Instability of Italian government[1]	January 31	21%	17%	0%	-4%
Erdogan reelected[1]	January 31	68%	85%	100%	17%
Sources: [1]GJO, [2]Metaculus					

3. Conclusion

Enhancing the visibility of the Franklin University:

- FRISKOP is the first available index that fully quantifies both the likelihood of geopolitical events and its potential economic impact
- Prediction market delivers largely accurate forecasts
- Can quickly be adapted to new questions
- How to make FRISKOP even more useful for practitioners?

A sure bet!

The Franklin Political Risk and Opportunity Index (FRISKOP)

Oliver Strijbis

Franklin University Switzerland

Political event forecasting with prediction market

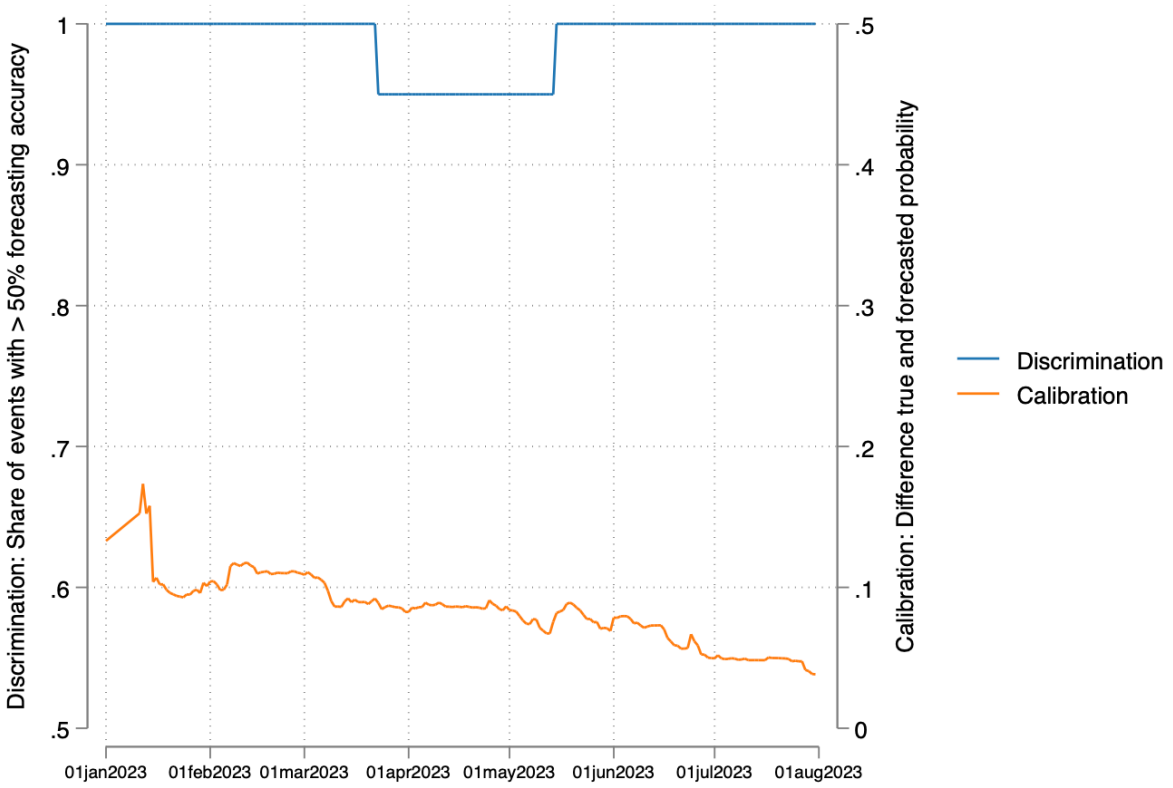



Figure: Discrimination and calibration