

UTILIZING ECONOMIC ACTIVITY AND DATA SCIENCE TO PREDICT AND MEDIATE GLOBAL CONFLICT



Kaylee-Anna Jayaweera
Lewis & Clark College
kjayaweera@lclark.edu

Caitlin Garcia
Lewis & Clark College
garcia@lclark.edu

Quinn Vinlove
Lewis & Clark College
quinnvinlove@lclark.edu

Jens Mache
Lewis & Clark College
jmache@lclark.edu

Abstract

The year 2020 has left many individuals finding that their lives are continually being changed based on the state of global circumstances. Some believe that these changes have given many citizens the opportunity to understand the interconnected nature of global actions and domestic consequences.

Our preliminary hypothesis and research centers around the belief that an informed global population produces a safer, and better prepared, global society. It is our understanding that when individuals are able to reasonably prepare or expect conflict, early mediation and resource management can not only save tremendous funds, but also save numerous lives.

We believe that creating a source of accessible predictive models is not only possible, but can be done without tremendous resource demand by tracking key pointers within the global economy and historic conflict triggers.

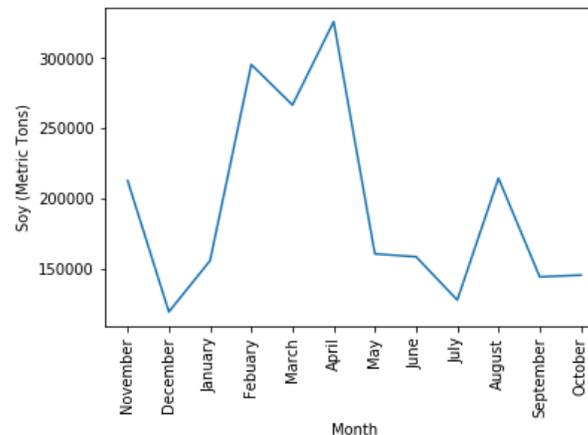
Discussion and Conclusion

Though this is all a preliminary study, we believe that this is certainly a route that should be further explored. We want to be sure not to overstep and assume that this seeming correlation is foundation enough to point to consistent and reliable conflict prediction, only that it is certainly a sure step in the right direction.

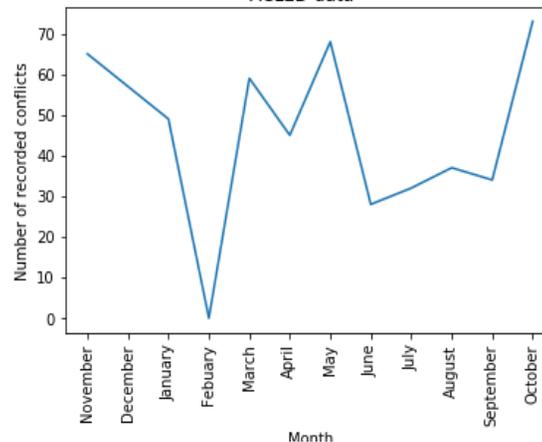
Now remains the task of weeding out effective economic market pointers. So far, soybean and other soy products prove promising; however, we don't want to close ourselves off from the idea that there may be certain types of products that are better predictors than others depending on the global location of conflicts.

In any case, the discovery continues at the horizon of efficient conflict prediction and global cooperation, preparedness, and growth.

US exports of soy to Indonesia, 2015



Conflicts/Month recorded in Indonesia, 2015
ACLED data



Thought Process

Our thought process is as follows:

Imagine you are the leader of a country, and you have just realized that there is a virus within your borders that has hazardous trends likely to cause a global pandemic if it were to remain unchecked.

Thinking as a strong leader, you want to make sure that your own country has the supplies and necessities in order to survive the potential wave of pandemic to follow. To do this, you now invest heavily in Personal Protective Equipment (PPE), hoard food and take investments from the transportation industry and move them into your own domestic no-contact shipping.

In the name of self-preservation and protection from the chaos to follow, ideally this would all happen before you tipped off, and likely downplayed, the severity of the situation to the rest of the international community.

The flip side:

Now, take this scenario and imagine that there was a widely available and easily readable system that could point to potential areas of conflict or unrest by observing economic activity that historically was paired with international and/or domestic conflict. It lets the entire world know that you, the strong leader, and your country are acting and investing in a way that would point to domestic issues.

In this new scenario, as a response to this system there would be widespread accountability, resource management, crisis mitigation, global security and knowledge accessibility potentially saving thousands, if not millions, of lives.