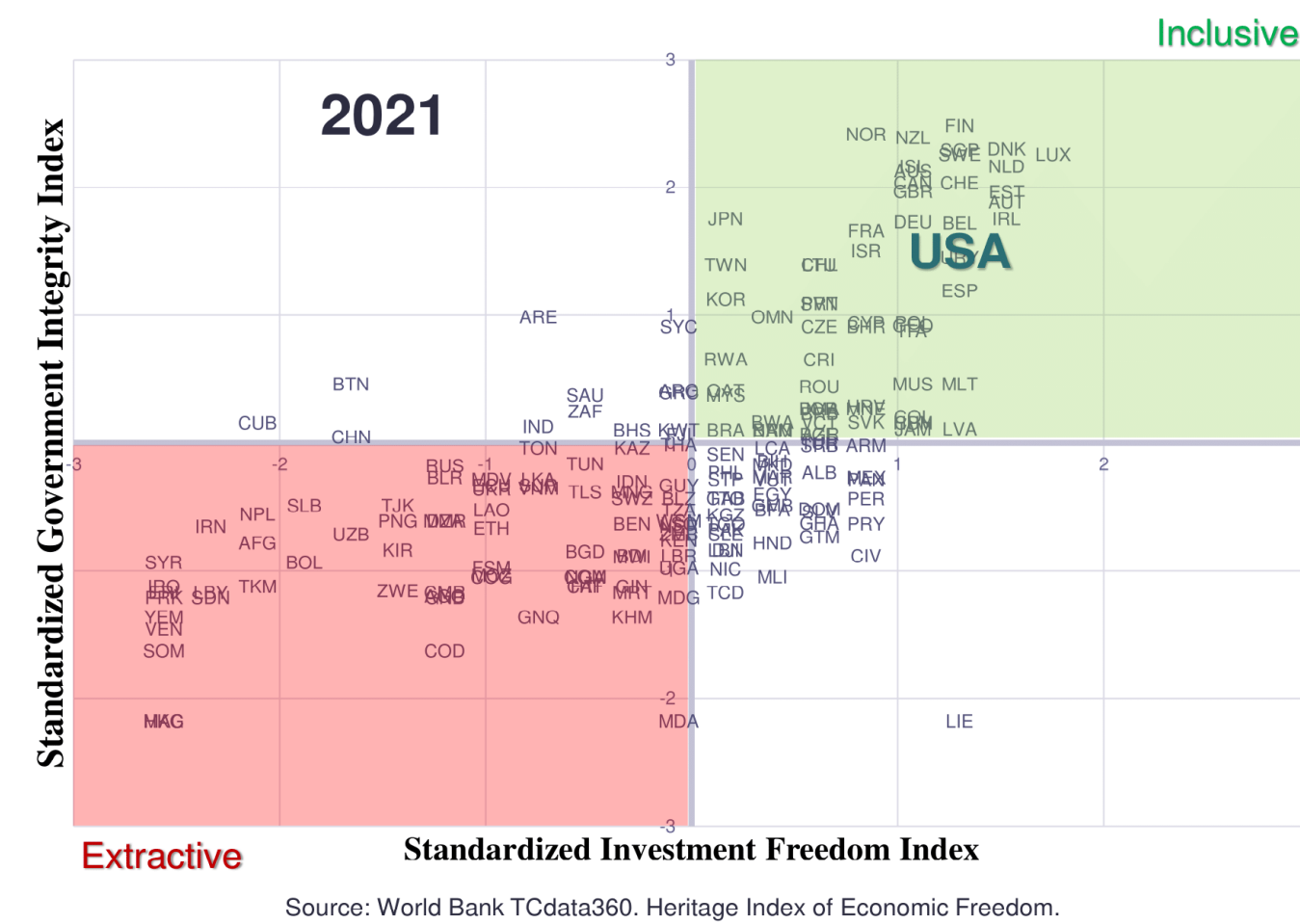


Introduction

- **Cross-country Comparative Institutional Analysis** – Method of assessing risk through the lens of politics and economics
- **Goal** – Develop a tool for creating cartesian visualizations of and analyzing the relationship between economic freedom, political constraints, and macroeconomic performance indicators, across different countries and time-periods



Implementation Details

Tooling

- Data processing conducted using Python, pandas library
- Data visualization website created using Streamlit, a Python framework for interactive, data-centric applications

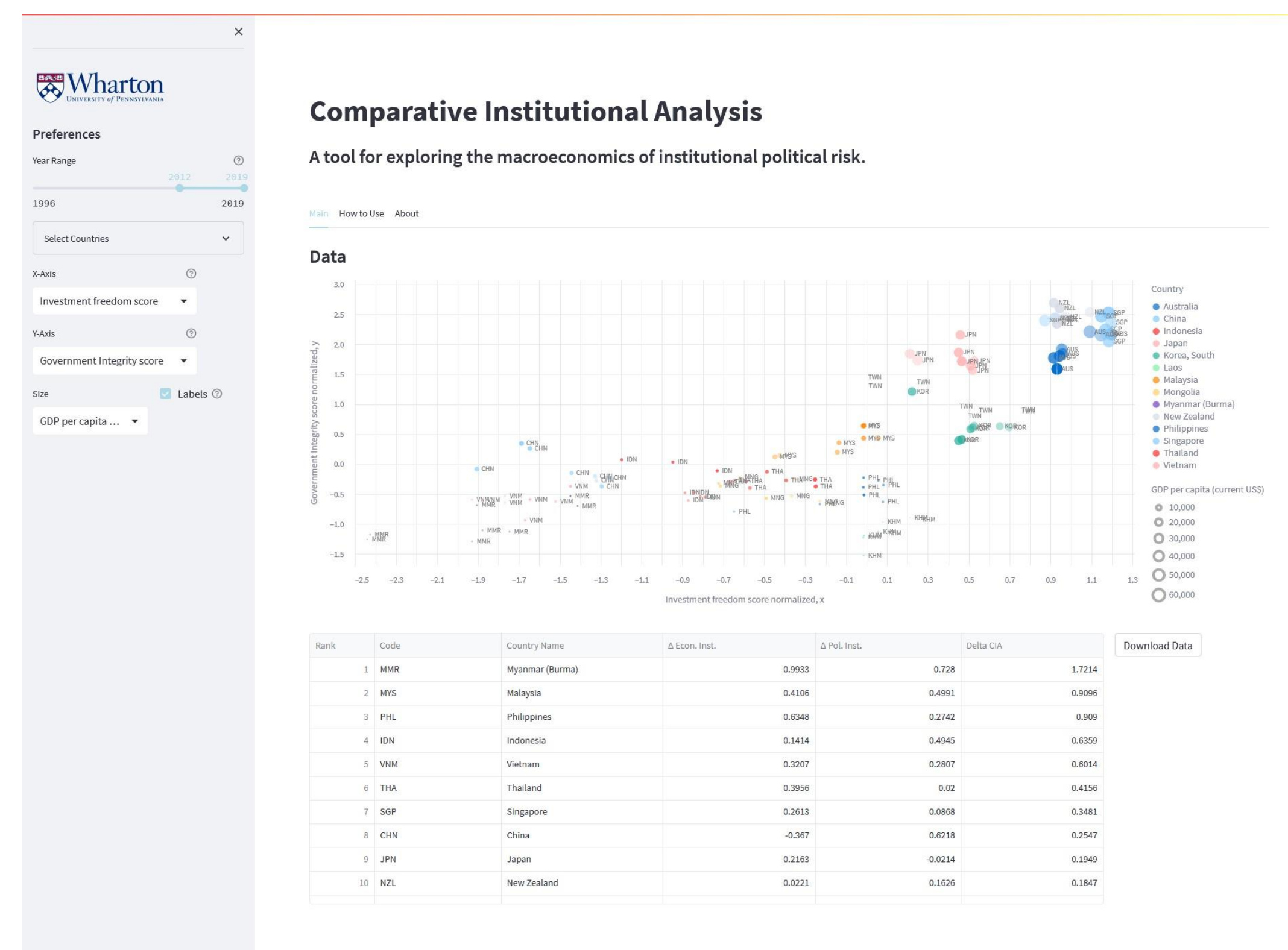
Features

- Select timeframe, countries / regions to consider
- Explore relationships between various political and economic axes
- View and save visualizations and raw data for variables, particularly for normalized time deltas

Conclusion

Analyzing relative changes in economic and political regimes between countries is crucial in predicting key indicators of economic performance and business risk.

Figure 1: Live Website Demo



- Hosted at ciaframework.streamlit.app
- Save and share visualizations using the “Download Data” button or the “Save as PNG” option under the top-right chart dropdown

Methodology

- Synthesized three primary data sources:
 1. Data Bank – published by the World Bank, containing time series data for a variety of indicators. This project uses various macroeconomic indicators within the *World Development Indicators* dataset.
 2. Index of Economic Freedom – created by the Heritage foundation. This project uses the investment freedom and government integrity scores.
 3. Political Constraint (POLCON) – developed by Vice Dean Witold Henisz of the Wharton School, measuring institutional rigidity across national political institutions.
- Merged by ISO-3 Country Code, using ML / transformers-based semantic similarity matching across names



Sources

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