

FREDERICK S. PARDEE CENTER FOR INTERNATIONAL FUTURES

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COMPARING MEASURES OF INFLUENCE



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EXECUTIVE SUMMARY

In the pages that follow, we qualitatively and quantitatively assess the performance of three measures of influence: Merged Yearly Relational Interaction Affinity & Dependence (MYRIAD) 1.0, MYRIAD 2.0, and the Foreign Bilateral Influence Capacity (FBIC) index. From this analysis come two main takeaways:

- Adding and removing variables from a measure of influence makes longitudinal analysis difficult, if not impossible. This limits the utility of both MYRIAD 1.0 and, particularly, MYRIAD 2.0.
- Each measure of influence behaves quite similarly over time with a few exceptions. MYRIAD 2.0 is occasionally out of sync with historical conditions. MYRIAD 1.0 reflects these conditions more accurately but is subject to sudden large shifts in influence. FBIC reflects these conditions similarly to MYRIAD 1.0 but generally characterizes shifts in influence as more gradual phenomena.

In our quantitative analysis, we examine summary statistics, the distribution of the data, volatility as measured by one-year changes in influence in terms of standard deviations, correlations among one another, and the varying characterizations of changes in influence over time, both globally and for select cases. One complication for this comparison lies in the differing complexity of each measure, with MYRIAD 2.0 taking what resembles a “kitchen sink” approach, MYRIAD 1.0 growing bulkier over time, and FBIC taking a more parsimonious approach. Still, across most elements, all three measures are broadly similar, with FBIC and MYRIAD 1.0 bearing the closest resemblance and also the best performance across our period of interest, 1963 to 2017.

Qualitatively, we then compare how each measure performs relative to three pivotal historical events: the Sino-Soviet Split, the Vietnam War, and Kosovo’s declaration of independence. Specifically, we develop hypotheses for how nations should align themselves with the major powers involved in each event based on historical records and then test the fit of each measure of influence. Across these case studies, we find both FBIC and MYRIAD 1.0 to fairly accurately reflect historical events, while MYRIAD 2.0 is at times erratic and incorrect, particularly when comparing levels of influence cross-sectionally.

In aggregate, this analysis offers both quantitative and qualitative assessments of each measure of influence, each leading to similar conclusions. For a deeper understanding of these assessments, the remaining document proceeds as follows:

- A quantitative influence measure comparison divided into five parts: MYRIAD 1.0, MYRIAD 2.0, and FBIC overviews; a statistical and visual comparison of each measure; and an Appendix for supporting documents.
- A validation study of Communist bloc alignments for 20 nations following the Sino-Soviet Split.
- A validation study of belligerent coalitions, including 9 nation’s alliances during the Vietnam War.
- A validation study of recognition of Kosovo’s independence in the international community among non-neutral states, taking note of the dominant influencer at the time of each nation’s recognition decision.

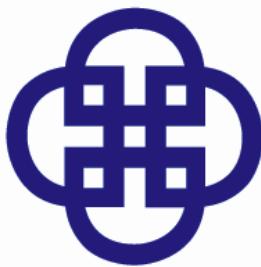
Each document is preceded by its own summary. Given a close reading, we expect them to offer insights into each measure’s strengths and weaknesses, as well as help analysts to better understand nation-state power dynamics, particularly bilateral influence.

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DIPLOMETRICS

**MEASURES OF INFLUENCE
QUANTITATIVE COMPARISON
MARCH 2019**

COLLIN MEISEL

Chapter 1

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QUANTITATIVE ANALYSIS SUMMARY

Bilateral influence in international relations is often discussed in qualitative terms, or, when quantified, becomes conflated with material power, a concept that is altogether different. The analysis that follows uses quantitative methods to examine and compare three quantitative measures of influence: MYRIAD 1.0, MYRIAD 2.0, and FBIC. When looking at each measure's distributional characteristics, temporal performance, correlations among one another, and transitions across time both globally and in select cases from 1963 to 2017, we develop three key takeaways:

- Across all three measures, the majority of influence is held by a small minority of countries (see Figures 1–3).
- Over time, the average share of influence has declined, but this has not necessarily translated to a more equal distribution of influence (see Figures 12–20).
- Across time, each measure offers a broadly similar characterization of nations' absolute and relative bilateral influence (see Figures 7–10 and 21–26), though MYRIAD 2.0 is prone to temporal volatility (see Figure 5) and occasionally mischaracterizes nations' likely historical levels of influence (e.g., see Figure 24).

Supporting documents for this analysis include summary statistics (see Tables A1–2, A4, and A7–8), calculation methods for each influence measure (see Tables A3 and A5 and Figure A1), and supplementary side-by-side comparisons of MYRIAD versions 1.0 and 2.0 (see Figures A2–5). In the future, we also plan to include country-specific influence measure comparisons for all countries for which data are available from 1963 to 2017.

INTRODUCTION

Conceptualizing relational influence, a measure of power distinct from much less rarely used hard power capabilities, is crucial to better understand international relations and the year-to-year changes in interactions between nations. In recent years, the Diplometrics project has contributed to three such conceptualizations: MYRIAD 1.0, MYRIAD 2.0, and FBIC. To assess the relative merits of these measures, each are described below and then compared based on their general similarities, temporal volatility, correlation among one another, changes in influence globally over time, and changes in influence using country comparisons from 1963 to 2017. (NOTE: 2017 scores have been manually calculated.) What results is a picture of broadly similar measures, particularly MYRIAD 1.0 and FBIC, with the latter appearing to perform slightly better in terms of pinning down timing in changes in influence and standing as the only forecastable measure.

MYRIAD 1.0 OVERVIEW

The MYRIAD 1.0 data cover 43,446 unique directed dyads from the years 1963 to 2017, totaling 1,769,675 directed dyad-year observations in all (NOTE: 2017 values have been manually calculated). Fifty percent of these observations occur between the year 1995 and 2017; thus, when analyzing variables in a pooled manner (i.e., across the entire set of dyad-years), it is important to note that the data are slightly skewed toward more recent years. Summary statistics for the MYRIAD 1.0 data as a whole are presented in Table A1 in the Appendix. As Figure 1 illustrates, the distribution of influence across countries within the period of interest (1963-2017) resembles the power law in statistics, where the majority of directed dyads are concentrated toward zero (i.e., having lesser influence) and the rest are spread across a long right tail (i.e., having greater influence).

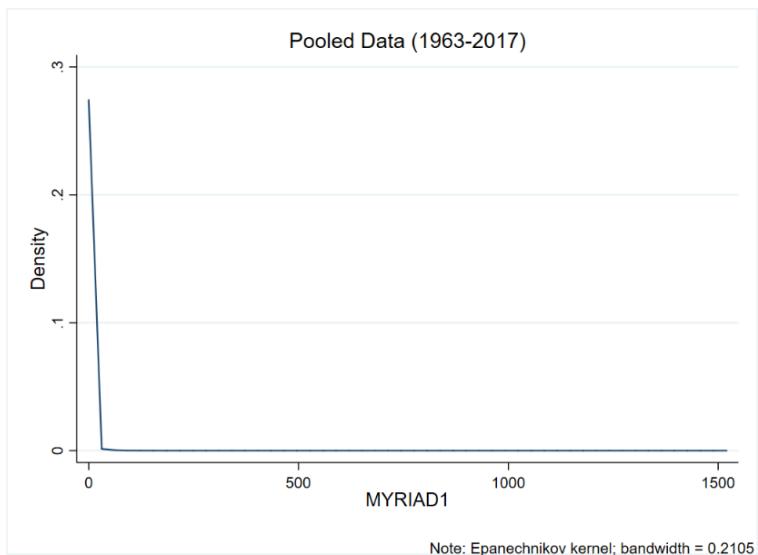


Figure 1. MYRIAD 1.0 Pooled Distribution

Among the MYRIAD 1.0 data, MYRIAD scores are missing from 578,087 dyad-years (33% of the full data) due to the same number of missing Affinity scores (see Table 1 below). These missing values are largely due to absent values for Polity Affinity in a given dyad-year. (The method for calculating MYRIAD 1.0 scores is presented in Table A3 in the Appendix.) As would be expected given the recent temporal skew in the data as a whole, missing MYRIAD scores are similarly skewed toward more recent years, with a mean year for missing values of 1992.25 and a median of 1993. When compared to the complete MYRIAD 1.0 data, observations with non-missing MYRIAD scores possess higher average values across nearly all measures. (For specific comparisons, cross-reference Tables A1 and A2 in the Appendix.)

Table 1. Overview of Missing Values for Variables Used to Calculate MYRIAD 1.0

| Variable | # Missing |
|------------------------|-----------|
| RivalryRatio | 140 |
| BTATradeAgreementIndex | 2,973 |
| IGOIndex | 101,896 |
| TreatyIndex | 161,779 |
| PolityAffinity | 543,209 |
| Affinity | 578,087 |
| InterAff | 578,087 |

Temporally, data coverage varies according to each MYRIAD 1.0 subcomponent. Subcomponents that do not extend through the full period of interest (1963 to 2017) include: total migrant stock exchange and migrant dependence (1990 to 2017); foreign direct investment (FDI) dependence (1991 to 2017); total energy trade and energy dependence (1995 to 2017); and total remittances and remittances dependence (2010 to 2017). (Data sources, weights, and temporal coverage for each variable are displayed in Table A3 in the Appendix.) These periodic additions of index components are likely to create anomalies in MYRIAD 1.0's performance across time.

MYRIAD 2.0 OVERVIEW

The MYRIAD 2.0 data cover 43,740 unique directed dyads from the years 1945 to 2017, totaling 2,022,660 directed dyad-year observations in all (NOTE: 2017 values have been manually calculated). For the sake of comparison with our other influence measures, we restrict the remainder of our analysis to observations from 1963 to 2017. This leaves 1,769,675 dyad-years spread across 43,446 unique directed dyads—a sample that is identical to MYRIAD 1.0. As such, the data are similarly slightly skewed toward more recent years. Summary statistics for the MYRIAD 2.0 data as a whole are presented in Table A4 in the Appendix. Similar to MYRIAD 1.0, the distribution of influence across countries within the period of interest (1963–2017) also resembles the power law in statistics for MYRIAD 2.0, although possessing a slightly more even dispersed distribution.

In contrast to MYRIAD 1.0, MYRIAD 2.0 scores and data for each of its subcomponents are complete. However, this is due to missing values being presented as zeros. In reality, many subcomponents do not extend through the full period of interest (1963 to 2017), and are thus likely to cause sudden shifts in directed dyads' MYRIAD score from year-to-year. These incomplete subcomponents include: troop deployments, in and out (1980 to 2017); migrant stock in, migrant stock out, and migrant dependence, relative and absolute (1990 to 2017); troop presence, relative and absolute (1993 to 2017); energy exports, energy imports, and energy dependence, relative and absolute (1995 to 2017); tourists in, tourists out, and tourist dependence, relative and absolute (1995 to 2017); FDI out-stock, FDI in-stock, and FDI dependence, relative and absolute (2001 to 2017); joint military exercises (2002 to 2017); and remittances in, remittances out, and remittance dependence, relative and absolute (2010 to 2017). Data sources, weights, and temporal coverage for each variable as well as the MYRIAD 2.0 calculation method are displayed in Tables A5 and A6 in the Appendix.

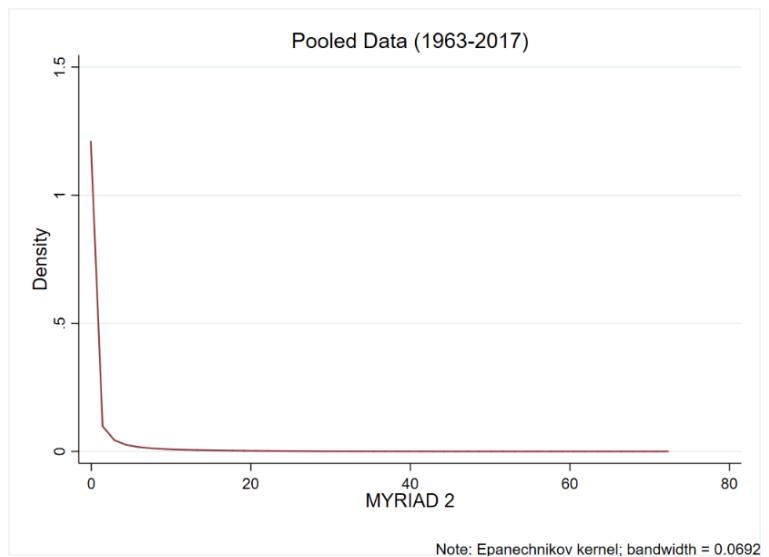


Figure 2. MYRIAD 2.0 Pooled Distribution

FBIC OVERVIEW

The FBIC data cover 59,424 unique directed-dyads from the years 1963 to 2017 across 2,248,491 directed dyad-year observations (NOTE: 2017 values have been manually calculated). Fifty percent of these observations occur from 1995 to 2017; thus, the data possess a similar skew towards recent years compared to MYRIAD's 1.0 and 2.0. Summary statistics for the complete FBIC data are displayed in the Appendix in Table A7.

Among this data, influence scores are currently missing from 933,023 dyad-years (42% of the full data). While this percentage may seem high relative to MYRIAD 1.0, it is important to note that the FBIC data include several hundred thousand more directed dyad-year observations. Many of these additional observations include minor territories, such as the Pitcairn Islands, for which data are sparse. In particular, missing FBIC values are largely due to incomplete trade data.

(For a complete list of missing values, see Table 2). When missingness is taken into account, the median observation year is 1998.

Notably, the subcomponents used to calculate FBIC's influence measure remain consistent throughout time. In other words, FBIC's calculation procedure (displayed in the Appendix in Table A9) remains unchanged across the period of interest in this comparison, 1963 to 2017. A notable forthcoming exception is the alliance index, which, while remaining in the FBIC calculation method, will transfer from Correlates of War project data to Rice University's Alliance Treaty Obligations and Provisions project. While the latter covers a more comprehensive set of treaties, the two indices scale similarly. Thus, this transition should not affect FBIC's consistency.

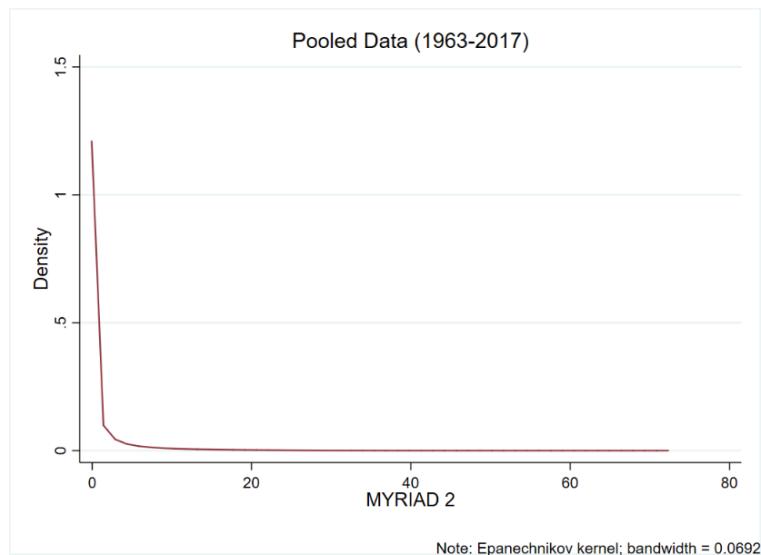


Figure 3. FBIC Pooled Distribution

Table 2. Overview of Missing Values for Variables Used to Calculate FBIC

| Variable | # Missing |
|---------------|-----------|
| IGO_Weights | 364,571 |
| LN_TotalTrade | 841,878 |
| Norm_Lor_Avg | 220,191 |
| Bandwidth | 933,023 |

HOW DOES EACH MEASURE COMPARE?

Given that the concept of influence offers no single metric against which to assess the relative performance of MYRIAD 1.0, MYRIAD 2.0, and FBIC, we will compare each measure in areas of temporal volatility, correlation with one another, and each measure's characterization of changes in influence across time. This first area offers an insight into the face validity of each measure, where no large year-to-year increase in influence would belie real-world events where relations between nations have changed rapidly (e.g., the surge of US influence in Iraq post-2003) but too many large year-to-year increases could signify noise and inconsistency in the measure itself. Correlations describe whether each measure of influence is in fact measuring the same thing. Finally, assessing changes in influence over time allow analysts to compare global trends and apply subject matter expertise to specific countries and regions to judge whether each measure performs as would be expected. (For those interested the specific changes from MYRIAD 1.0 to MYRIAD 2.0, see Tables A3, A5 and A6 as well as Figures A2 through A5 in the Appendix.)

TEMPORAL VOLATILITY

As Figures 1 through 3 illustrate, each measure of influence is subject to a certain measure of volatility over time. For MYRIAD 1.0, large one-year increases and decreases in influence are particularly frequent from roughly 1970 to 1990, but have largely tapered off since then (see Figure 4).

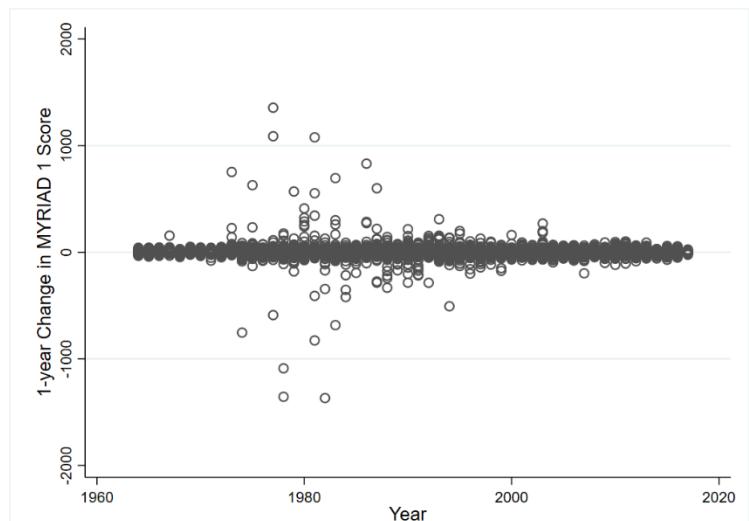


Figure 4. 1-year Change in Influence Across All Dyads, MYRIAD 1.0

MYRIAD 2.0, by contrast, has increased in volatility in time, providing scores that suggest the largest changes in influence have in fact become more frequent over time (see Figure 5). While FBIC displays slightly increased in volatility over time as well (Figure 6), these “blips” appear to occur to a somewhat lesser degree relative to MYRIAD 2.0.

However, readers may note that the varying scales of each measure of influence makes comparisons of volatility difficult. Hence, we also compare the changes in influence across each measure in terms of standard deviations from the mean. Given that the distribution of year-to-year change for each influence resembles a Laplacian probability density (i.e., a pointed-looking normal distribution with long tails), we have chosen to define an extreme year-to-year change in influence as that of six standard deviations from the mean (double what is often considered an outlier where normal distributions are concerned).

Across all observations for which data are available, MYRIAD 1.0 possesses the least number of outliers in year-to-year changes at 1,353. This number is somewhat misleading, however, given the size of MYRIAD 1.0’s standard deviation relative to its mean (4.6 and 0.056, respectively). Despite appearances with regards to Figure 1, the temporal distribution of these six-standard-deviation outliers is largely balanced, with no year accounting for more than 3% of outliers. Regionally, the data tell a different story, where influencees (CountryB) Liberia and Somalia individually account for 14% of all outliers, and influencers (CountryA) the United States (US), United Kingdom (UK), Italy, and Japan each account for 13%, 7%, 7%, and 6% of all outliers, respectively. Unsurprisingly, given the prominence of both Liberia and Somalia, influencees from Africa comprise the majority of outliers at 68%. Roughly 52% out of outlying dyads’ influencers are European nations.

Likely due to the several temporal transitions in its calculation method, MYRIAD 2.0 displays six times as many six-standard deviation outliers relative to MYRIAD 1.0, with 8,670 in total. While the US accounts for 5% of outliers as an influencing nation, few other geographic patterns stand out (Europe and Africa are slightly overrepresented as influencers and influencees, accounting for 36% and 40% of outliers, respectively, while both regions each account for less than one-third of all country-years). Temporally, outliers are fairly balanced as well, though they display a slight skew towards the 2000s, with 2010 accounting for 5% of outliers.

FBIC’s six-standard deviation outliers (4,887 in total) are characterized by a slight geographic skew, with the somewhat to-be-expected¹ nations of the US, France, and the UK accounting for 16%, 10%, and 9% of influencing nations among outlying dyads, respectively. Furthermore, 55% of outlying influencing nations are European, as are 33% of influenced

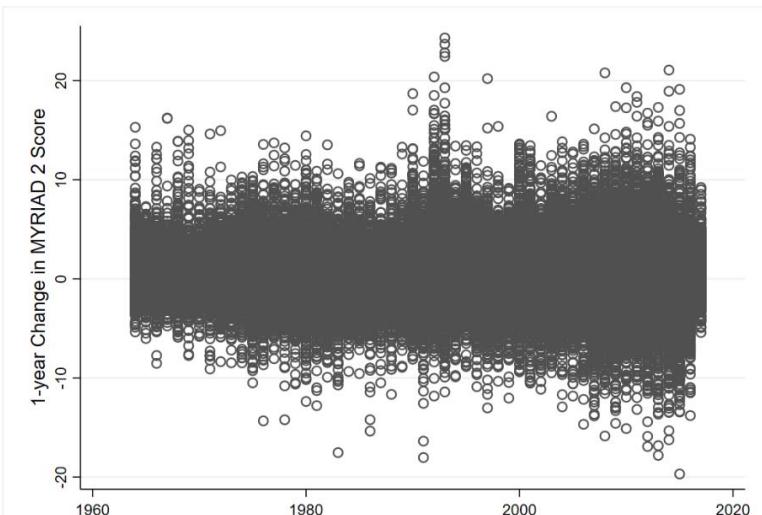


Figure 5. 1-year Change in Influence Across All Dyads, MYRIAD 2.0

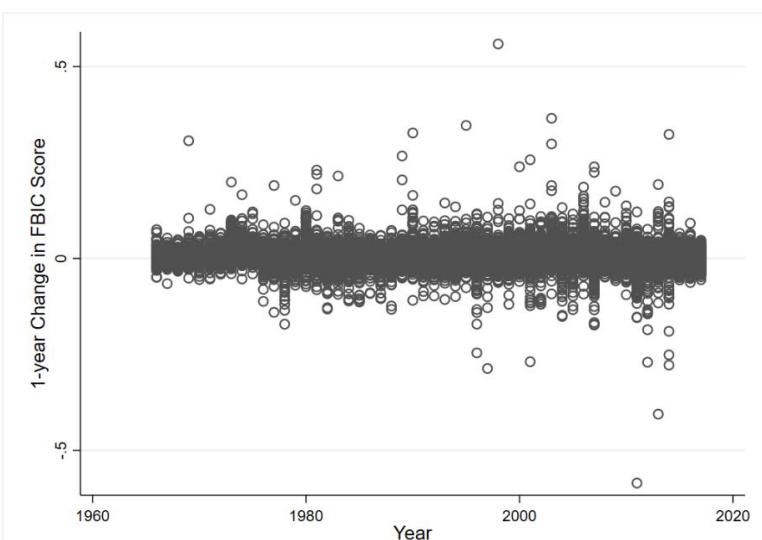


Figure 6. 1-year Change in Influence Across All Dyads, FBIC

¹ Here, an outlier signifies a rapid 1-year increase or decrease in influence of Country A on Country B. Hence, nations that are capable of exerting a great deal of influence can be expected to occasionally rapidly forge or bolster ties with a nation or cut them off.

nations. Meanwhile, no segment of time stands out in terms of sudden changes in bilateral influence, where no single year accounts for more than 3% of outliers.

Regarding volatility across the measures themselves, we examine non-outlying changes as well, specifically their direction. Between MYRIAD 1.0 and MYRIAD 2.0, the direction of year-to-year change in influence for identical dyads is similar just over half of the time (55%). Similar directionality is even less prevalent between MYRIAD 1.0 and FBIC along with MYRIAD 2.0 and FBIC, sharing similar year-to-year directional changes in influence just over one-third of the time (36% and 34%, respectively). However, across all years from 1963 to 2017, dyads possess similar average directional change in influence according to each measure much more frequently. Indeed, period-of-interest average changes in influence across all three measures share directionality for a full 75% of directed dyads. Still, that leaves more than a quarter of directed dyads whose average change in influence over the past 55 years differs not just in degree but also in direction depending on how influence is measured.

CORRELATION ACROSS MEASURES

Concerning correlation across measures, MYRIAD 1.0 bares a close resemblance to the other measures in absolute terms, with a correlation coefficient between MYRIAD 1.0 and MYRIAD 2.0 of 0.740 and 0.749 for MYRIAD 1.0 and FBIC. Similarly, absolute measures of MYRIAD 2.0 and FBIC correlate at 0.754. Given that each measure is scaled and weighted differently, however, these correlations are better visualized in relative rather than absolute terms. To obtain relative measures, we divide the sum of a given influencer's influence score in a particular year by the global sum of influence in that year. Visual representation of the correlation between these measures tell a similar story (displayed in Figures 4 through 7), with all three influence scores roughly tracking with one another, excepting a handful of outliers.

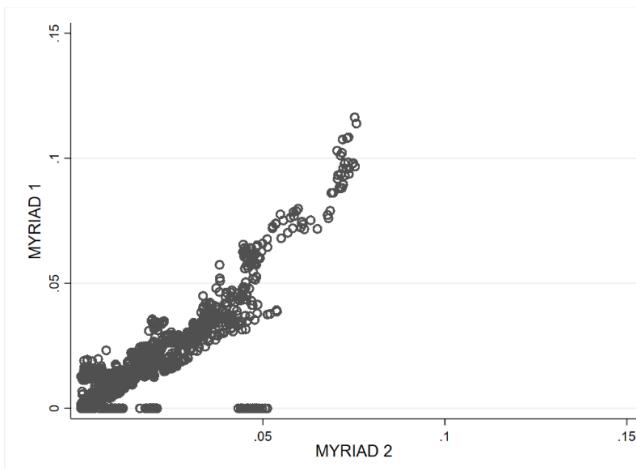


Figure 7. Share of Global Influence, MYRIAD 1.0 v. 2.0

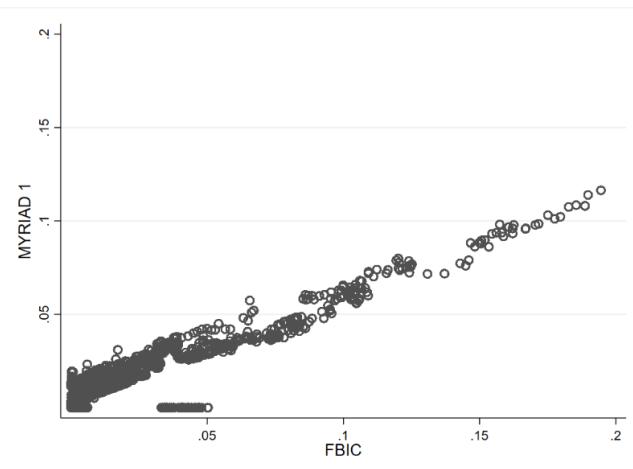


Figure 8. Share of Global Influence, MYRIAD 1.0 v. FBIC

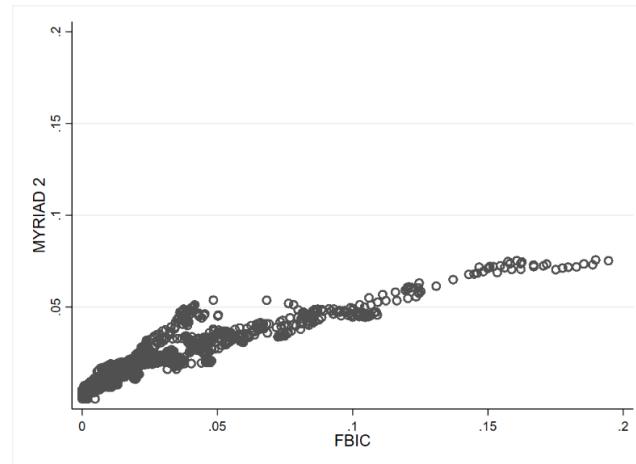


Figure 9. Share of Global Influence, MYRIAD 2.0 v. FBIC

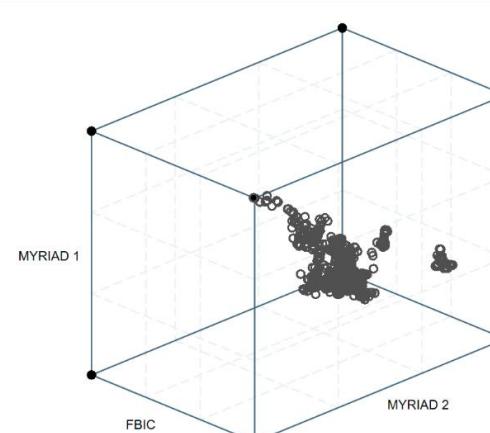


Figure 10. 3D Plot of Each Measure of Global Influence

CHANGES IN INFLUENCE OVER TIME: GLOBAL

Continuing with the share of global influence, the right-hand portion of Figure 8 illustrates the persistent decline in the average share of global influence across all three measures considered here. While an interesting story in itself, this decline becomes all the more so when compared to the left-hand portion of Figure 8, which depicts changes in the global sum of normalized influence. To explain further, these normalized influence scores were calculated by first subtracting the mean of all dyad-year's MYRIAD 1.0, MYRIAD 2.0, and FBIC scores (henceforth referred to as the population) from each dyad-year's specific respective score, and then dividing that value by the population standard deviation. Then, the value of the lowest resultant score was added to all scores, creating a baseline score of zero. What results is an absolute measure of influence within our period of interest (1963 to 2017). Thus, we can see that while the relative influence of nations has declined in recent years, the absolute amount of influence occurring between nations has increased across this same period.

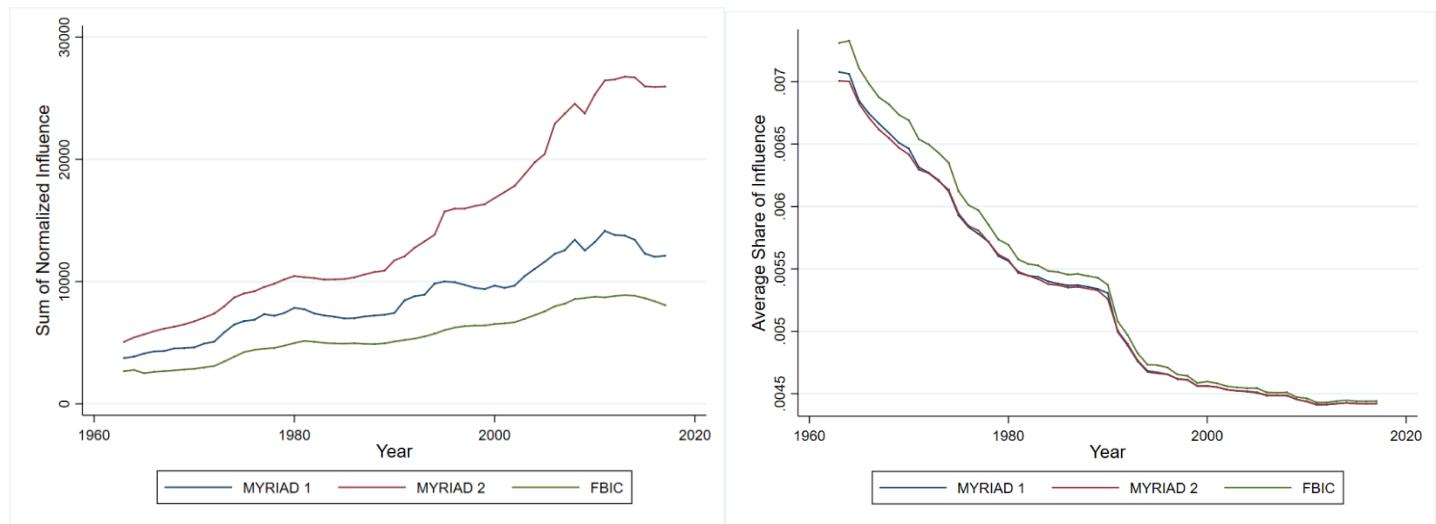


Figure 11. Sum of Each Normalized Influence Measure Over Time (Left) and Global Average Share of Influence (Right)

For a different look at how influence is distributed across each country and year, we compare each measure using Gini indices. In the figures that follow, these indices are displayed graphically using a Lorenz curve, where the cumulative share of bilateral influence is presented along the horizontal axis and the cumulative proportion of bilateral influence is presented along the vertical axis. Following each

Lorenz curve, then, the horizontal distance from zero denotes the number of directed dyads and the vertical distance from zero denotes that quantity of all bilateral influence in the sample period that has been accounted for up to that point. So, for example, in Figure 12 we can see that, according to MYRIAD 1.0 (the blue line), roughly 80% (or 0.8) of all directed dyads possess roughly 20% (or 0.2) of all bilateral influence from 1963 to 2017. The hypothetical possibility of an equal share of influence among all dyads is represented by the dashed line extending at 45 degrees from zero.

Given that Gini indices are sensitive to the changing size of the population under consideration (here, the number of countries which exist and for which data are available in a given year), we also construct cross-sectional indices from the first (1963), last (2017), and

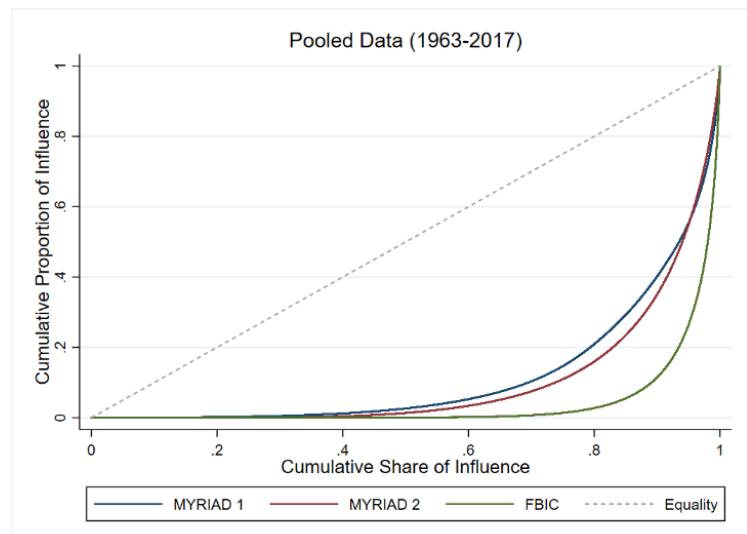


Figure 12. Lorenz Curves Describing Distribution of Pooled Influence Data

median (1990) years of our period of interest. Furthermore, we compare these indices with indices created using truncated data. Specifically, these truncations involve converting influence scores to zero when a directed dyad possesses less than one tenth of one percent (0.001) and one percent (0.01), respectively, of all global bilateral influence in a given year. The former truncation (0.001) eliminates statistical noise generated by the most minor directed dyads for which influence is essentially zero. The latter truncation allows us to consider the distribution of influence only across those directed dyads for which their share of global influence is noticeable (determined here to be a lower threshold of 1%).

As for the pooled data (i.e., all directed dyads from 1963 to 2017), the original and truncated data present varying distributions of influence depending on which measure is being used, with FBIC indicating a less equal distribution than MYRIADs 1.0 or 2.0 (see Figures 12–14). Cross-sectionally, this pattern holds for the years 1963, 1990, and 2017. However, the gap between these distributions narrows as the data are truncated (see Figures 15–17). Thus, among more influential nations, the distribution of bilateral influence varies little across each of the three measures.

Temporally, how the distribution of influence has changed over time varies as well. Using the full data (Figure 18), MYRIAD 1.0 describes a world where the distribution of influence has been fairly static (although slightly less equal) from 1963 to 2017. MYRIAD 2.0 describes a world where influence has become more equally distributed as time has passed, and FBIC describes a world where influence has become less equally distributed. Once truncation occurs at the 0.001 level and statistical noise is removed (Figure 19), however, these patterns become much less pronounced. At a truncation level of 0.01 (Figure 20), the patterns seen in the full data for MYRIAD 2.0 and FBIC disappear altogether. Here, MYRIAD 2.0 portrays a less equal world among more influential nations while FBIC portrays a world that had become more equal as of 1990, but that largely returned to 1963's status quo by 2017.

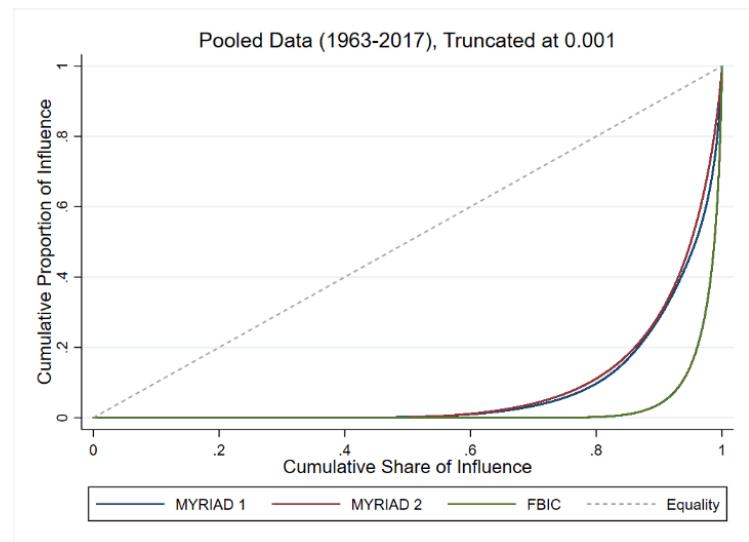


Figure 13. Lorenz Curves Describing Distribution of Pooled Influence Data—Truncated at 0.001

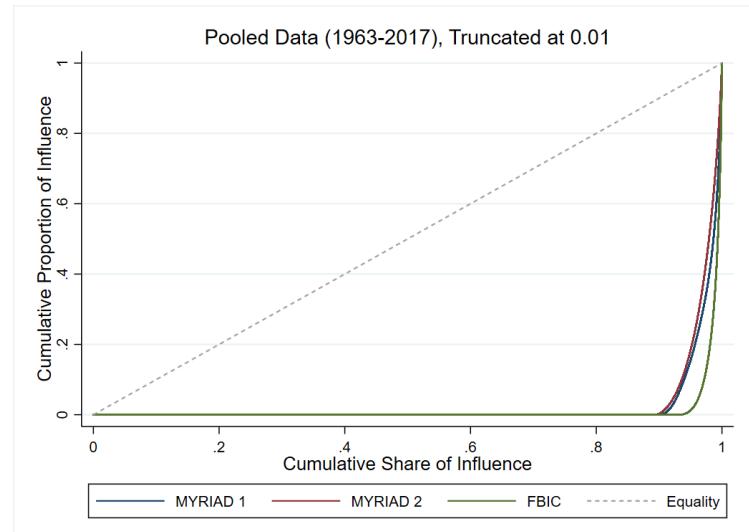


Figure 14. Lorenz Curves Describing Distribution of Pooled Influence Data—Truncated at 0.01

Once truncation occurs at the 0.001 level and statistical noise is removed (Figure 19), however, these patterns become much less pronounced. At a truncation level of 0.01 (Figure 20), the patterns seen in the full data for MYRIAD 2.0 and FBIC disappear altogether. Here, MYRIAD 2.0 portrays a less equal world among more influential nations while FBIC portrays a world that had become more equal as of 1990, but that largely returned to 1963's status quo by 2017.

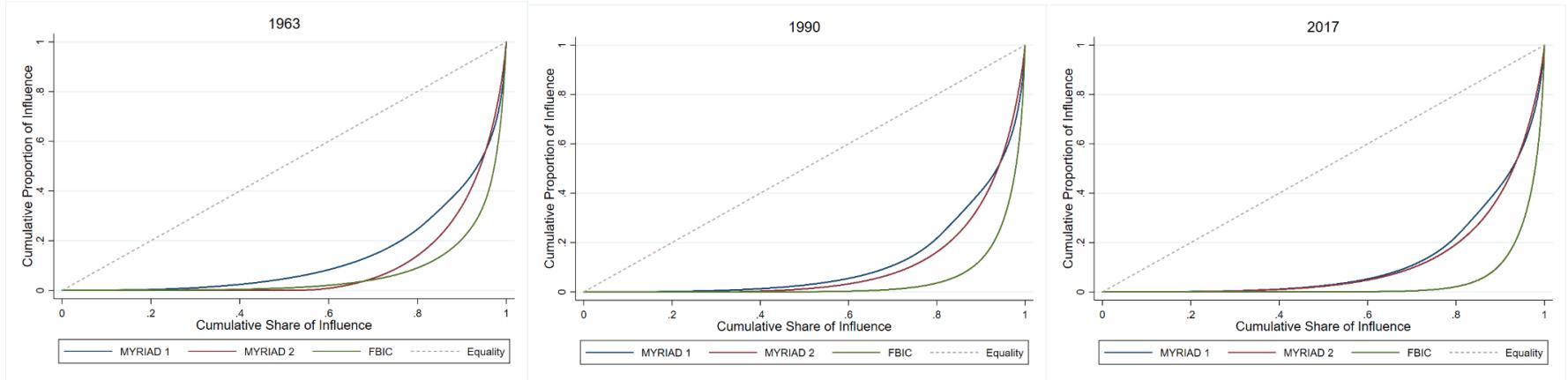


Figure 15. Lorenz Curves Describing Distribution of Influence, Cross-Sectional Comparisons for 1963, 1990, and 2017

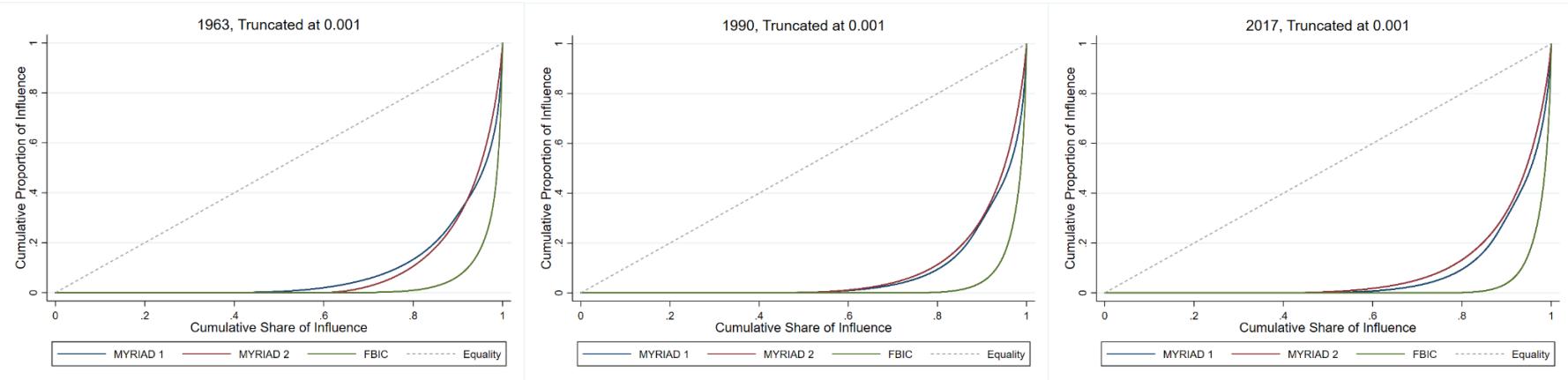


Figure 16. Lorenz Curves Describing Distribution of Influence, Cross-Sectional Comparisons for 1963, 1990, and 2017—Influence Scores Truncated at 0.001

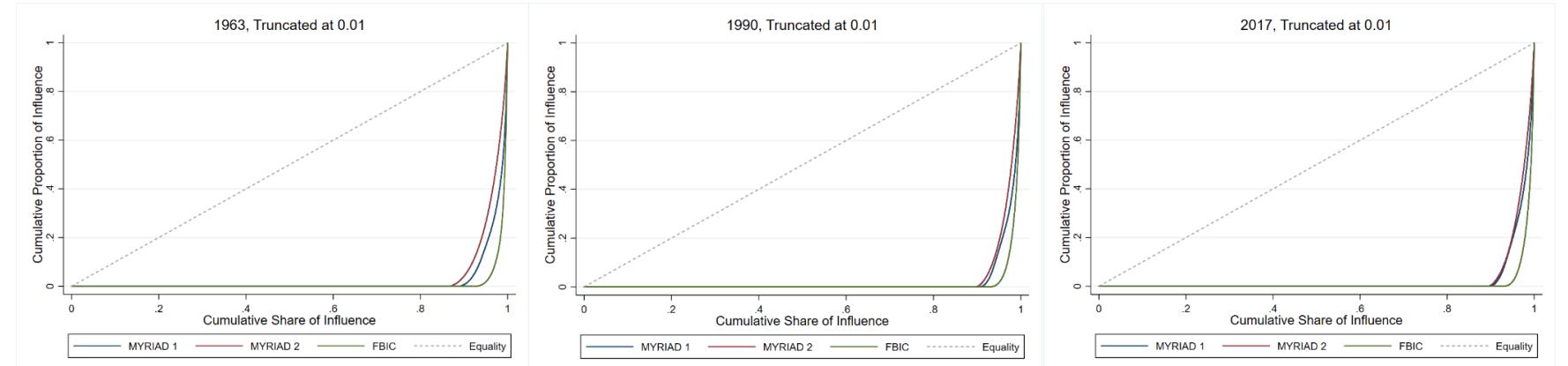


Figure 17. Lorenz Curves Describing Distribution of Influence, Cross-Sectional Comparisons for 1963, 1990, and 2017—Influence Scores Truncated at 0.01

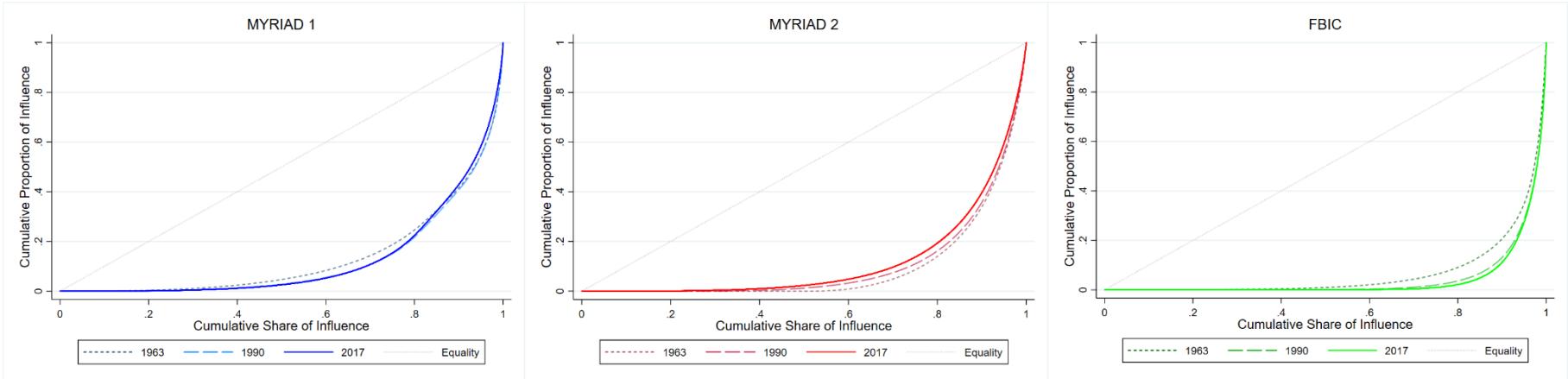


Figure 18. Lorenz Curves Describing Distribution of Influence, Temporal Comparisons for Each Measure

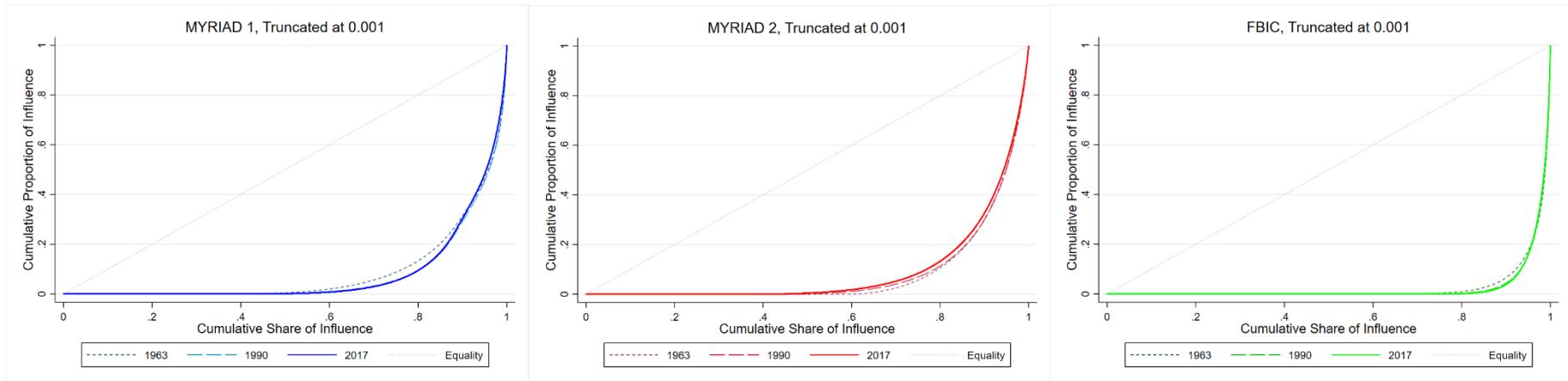


Figure 19. Lorenz Curves Describing Distribution of Influence, Temporal Comparisons for Each Measure—Influence Scores Truncated at 0.001

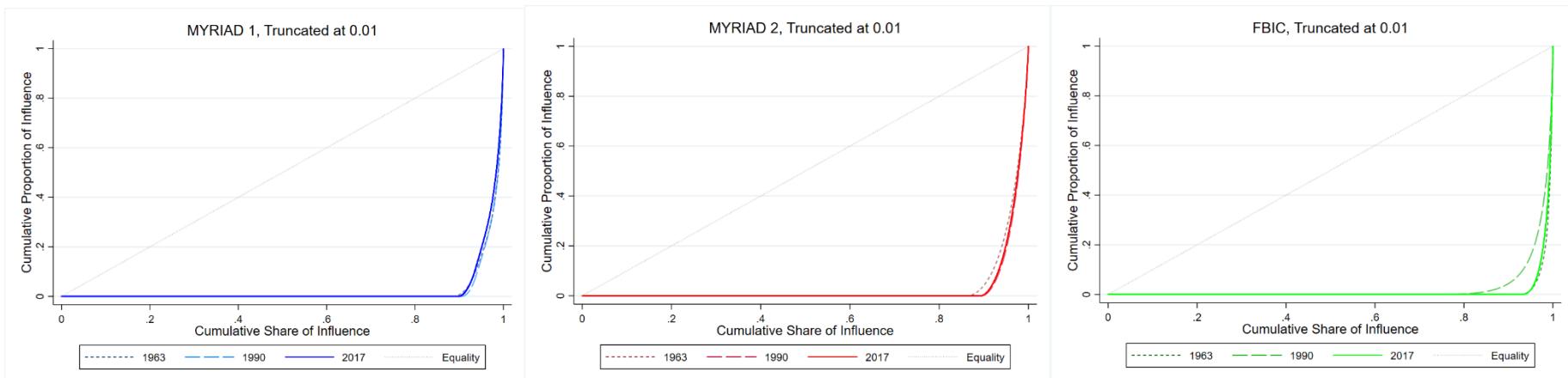


Figure 20. Lorenz Curves Describing Distribution of Influence, Temporal Comparisons for Each Measure—Influence Scores Truncated at 0.01

CHANGES IN INFLUENCE OVER TIME: SELECT CASES

Digging deeper into the story of absolute versus relative influence at the country level, we can see in Figure 21 that the relative influence of the US has largely followed the global pattern of decline across all three measures. In contrast, China's star appears to be rising in a relative sense. In absolute terms, China has also seen an increase in influence. For the US, however, it depends on which measure one consults. A MYRIAD 2.0 world, where absolute US influence continues to rise, is quite different from an FBIC world, where influence began to decline around the US invasion of Iraq and has yet to recover.

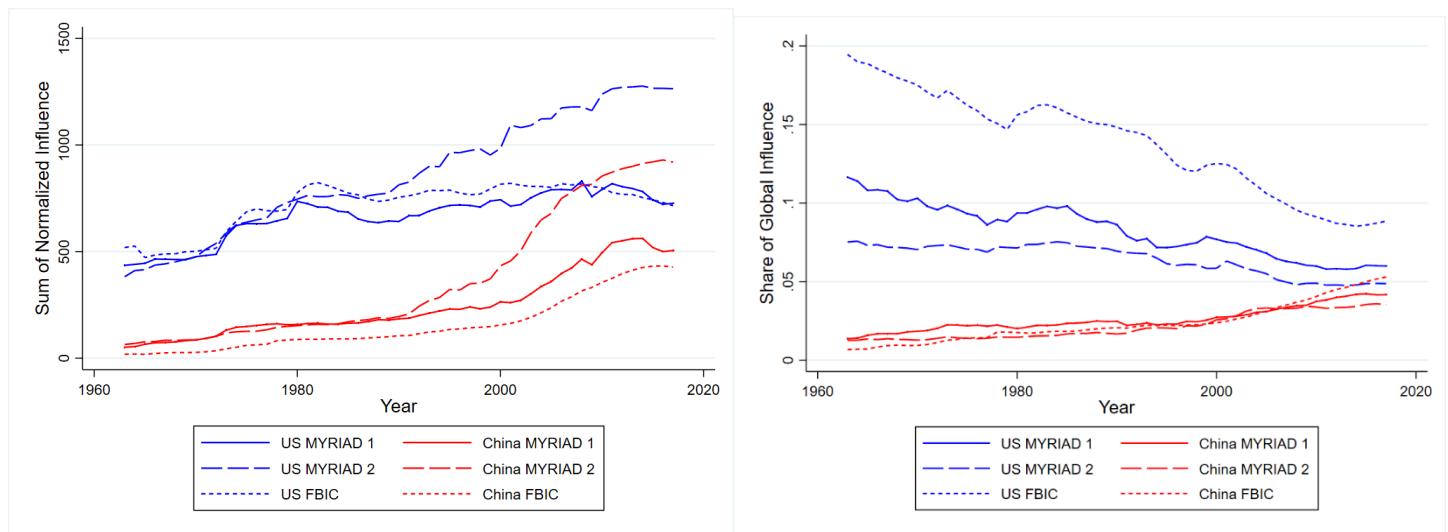


Figure 21. US, China, and Russia by Sum of Normalized Influence (Left) and Share of Global Influence (Right)

An examination of influence for South Korea and Japan (displayed in Figure 22) offers an additional story to unpack. The first, Japan's apparent relative decline in influence according to all three measures but absolute increase (at least according to MYRIAD 2.0), is similar to that of the US. However, given that FBIC and MYRIAD 1.0 show absolute declines in recent years, specific conclusions about Japan's continued influence merit scrutiny. Still, when viewed as a share of global influence, Japan's declining influence stands in sharp contrast to South Korea's continuing relative rise. Moreover, the convergence of relative influence among the two powers is robust, with each of the three measures painting striking similar pictures.

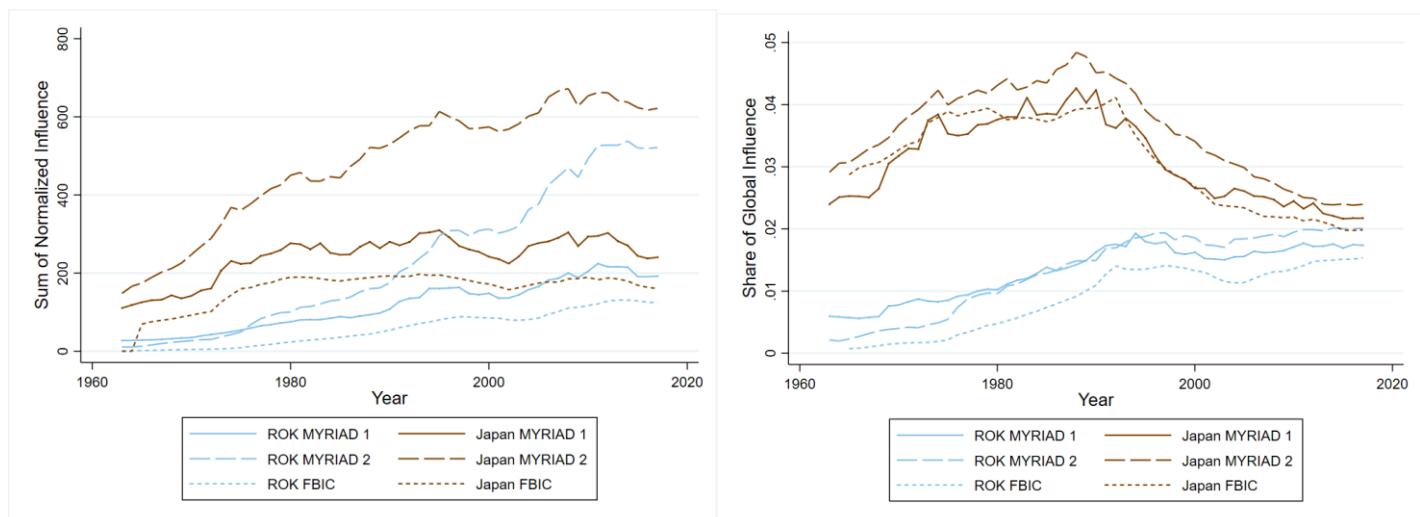


Figure 22. ROK and Japan by Sum of Normalized Influence (Left) and Share of Global Influence (Right)

Moving to a comparison between Ghana and Nigeria, shown in Figure 23, the patterns of changing influence for each country are again remarkably similar. One notable difference is FBIC's dynamism when viewed in terms of the share of global influence, with Nigeria seeing a tripling of its influence from 1963 to 1980 before declining by nearly the same amount between 1980 and 2017. Another is MYRIAD 2.0's attribution of a great deal more normalized influence to Nigeria in recent years relative to MYRIAD 1.0 or FBIC. This latter difference may simply be due to MYRIAD 2.0's accumulation of its measure's subcomponents rather than any real change, however.

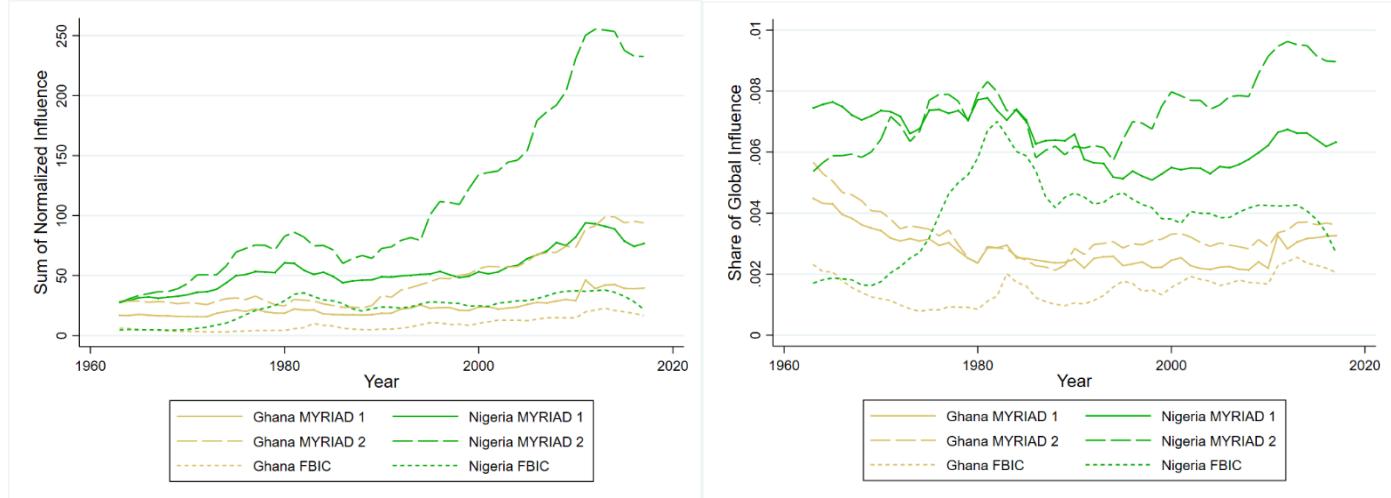


Figure 23. Ghana and Nigeria by Sum of Normalized Influence (Left) and Share of Global Influence (Right)

As another case deserving of consideration, Cuba and Nicaragua help illustrate the variability in the influence data (see Figure 24). Indeed, a close look reveals a handful of disagreements across each measure's accounting of influence, where, for example, FBIC affords Nicaragua a larger share of global influence than Cuba for the majority of the period of interest, excluding a brief period between 1986 and 1992. Meanwhile, according to MYRIAD 1.0, Cuba's share of influence exceeds Nicaragua's until the early 1990s, when it follows a pattern similar to FBIC. Entirely out of step with the other measures, MYRIAD 2.0 affords Cuba a greater share of global influence than Nicaragua throughout the entire period of interest. These same patterns hold when viewed in absolute terms as well. Which measure is correct? While this is an answer best left to regional experts, FBIC appears to best capture Nicaragua's likely decline of relative influence as it turned inward during its revolution from 1972 to 1990.

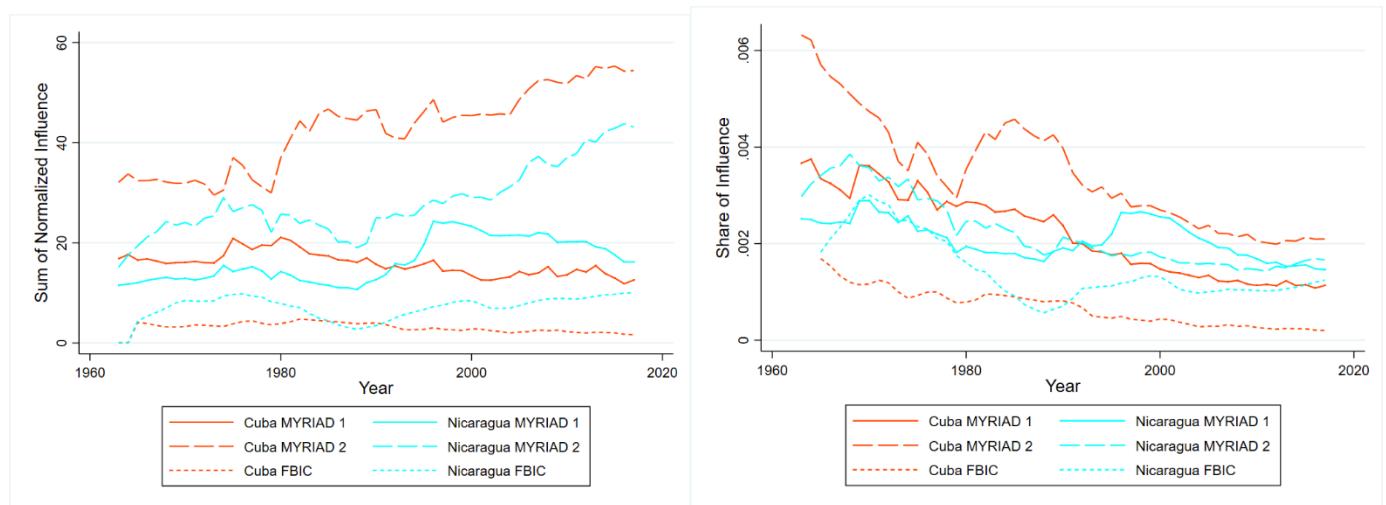


Figure 24. Cuba and Nicaragua by Sum of Normalized Influence (Left) and Share of Global Influence (Right)

A comparison between the absolute and relative share of bilateral influence for Egypt and Israel further reveals the variability across FBIC and each version of MYRIAD. MYRIAD 1.0 shows Egypt tracking with Israel until roughly 1976 and being significantly outshined thereafter. MYRIAD 2.0 affords Egypt more influence in all years but 1993 and 1994, where the two share roughly equal amounts of absolute and relative influence. In contrast, FBIC shows a distinct crossover in

influence around 1979, where Israel surpasses Egypt and continues to possess more bilateral influence. While the merits of these differences are again best left to regional experts, the concurrence of the Egypt-Israel Peace Treaty of 1979 and the transition between which nation possessed greater influence according to FBIC is uncanny.

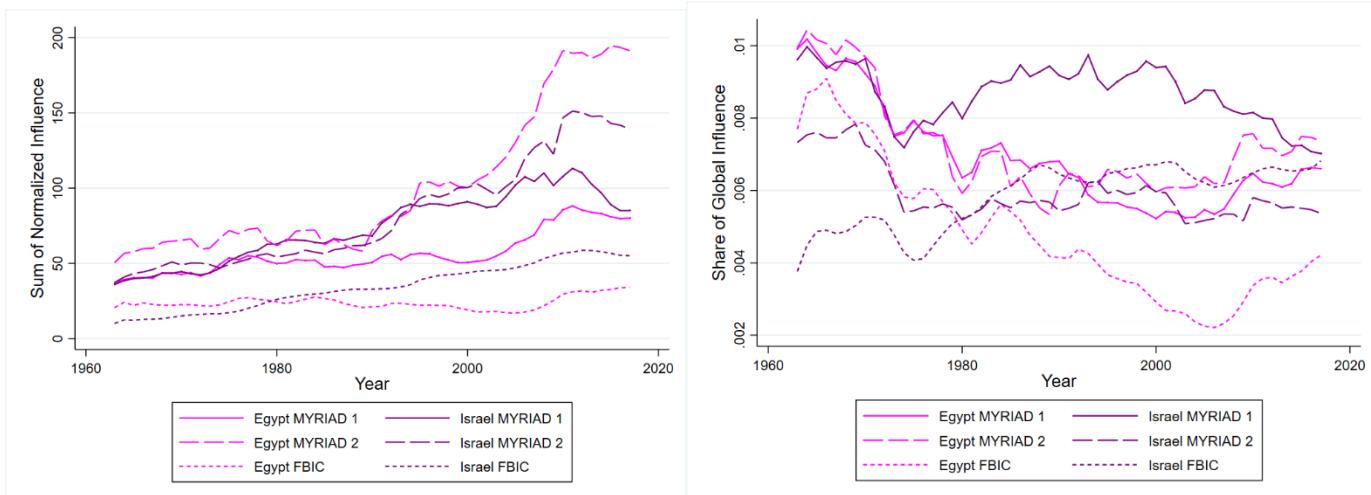


Figure 25. Egypt and Israel by Sum of Normalized Influence (Left) and Share of Global Influence (Right)

As a final interesting contrast, each measure of influence provides a different description of the influence possessed by Germany and France relative to one another. According to FBIC, Germany surpassed France in terms of absolute and relative influence between 1996 and 1997. MYRIAD 1.0 maps out several transitions, where German influence exceeds the French during the mid- to late-1990s, dips below it in the early 2000s, and then continues to exceed it from the mid-2000s onward. In the final year during the period of interest, MYRIAD 1.0 attributes Germany nearly half of the share of global influence as FBIC does, measuring at just over 4% and nearly 8%, respectively. As a clearer outlier again, MYRIAD 2.0 suggests that Germany's influence has exceeded that of France since the fall of the Berlin Wall, with both possessing less than 4% of global influence as of 2017.

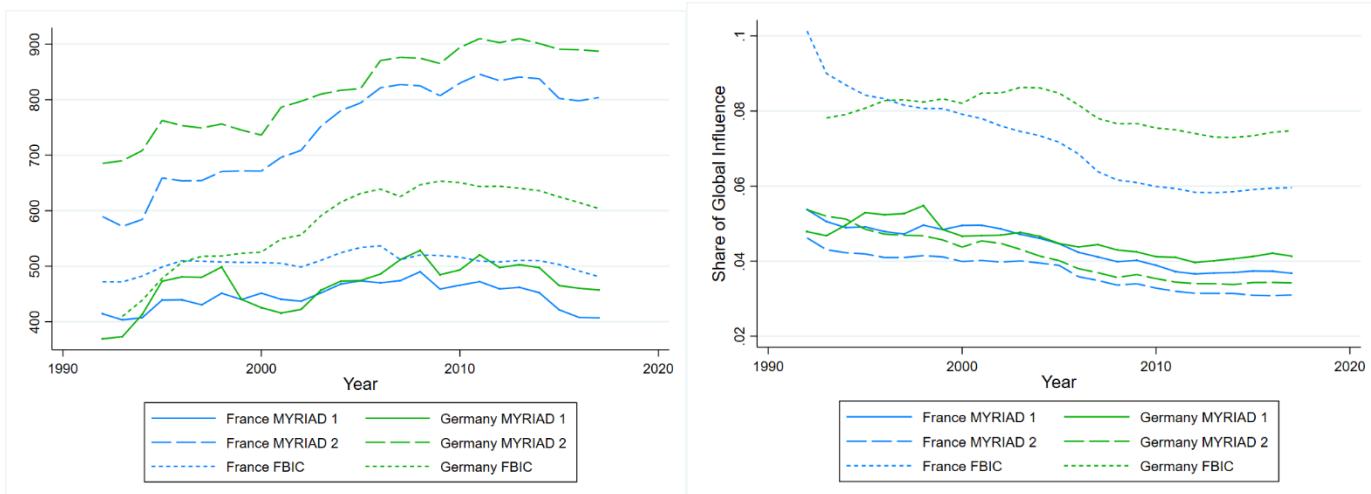


Figure 26. France and Germany by Sum of Normalized Influence (Left) and Share of Global Influence (Right)

CONCLUSION

When viewed in conjunction with the accompanying Diplometrics qualitative case studies of influence, these and other examples offer analysts a great deal to consider as they tackle the questions: What is influence, and how do we measure it? MYRIAD 1.0, 2.0, and FBIC offer three potential sets of answers.

While all three measures paint broadly similar pictures of bilateral influence from 1963 to 2017, individual case comparisons reveal several areas where the measures are in disagreement. Given the several changes in MYRIAD 2.0's

calculation method from 1963 to 2017 as well as the several cases where its measure of influence is out of step with the other two measures—and indeed, historical events—MYRIAD 2.0 appears to be the least adequate measure of the three (barring, perhaps, its more neatly spread distribution [see Figure 2]). In contrast, the differences between MYRIAD 1.0 and FBIC appear closer to the margins, exhibiting similar patterns but occasionally disagreeing on the timing of changes in influence. Interestingly, in the case comparison of Egypt and Israel the more parsimonious FBIC appears to capture this timing more accurately.

As an extension of this analysis of historical data, it is important to note in conclusion that only FBIC values can be forecast. Several of the variables included in the calculation of each version of MYRIAD prevent this possibility. Moreover, the sheer number of these variables make unpacking even the historical changes in each measure considerably more difficult relative to FBIC. On the whole, then, FBIC appears preferable to the other measures when the goal is to measure and truly understand changes in bilateral influence across time. In specific cases, regional and country-level experts should assess the merits of each measure for themselves.

APPENDIX

TABLE A1: SUMMARY STATISTICS FOR THE MYRIAD 1.0 DATASET, ALL OBSERVATIONS

| VARIABLES | Mean | Std. Dev. | Min. | Max. |
|---------------------------|----------|-----------|--------|---------|
| Year | 1993 | 15.33 | 1963 | 2017 |
| EmbassyAvgDyad | 0.197 | 0.366 | 0 | 1 |
| TreatyIndex | 5.799B | 25.24B | 0 | 665B |
| IGOIndex | 58.37M | 148.9M | 0 | 4.834B |
| PolityAffinity | 12.41 | 6.289 | 0 | 20 |
| BTATradeAgreementIndex | 1.004 | 4.302 | 0 | 49 |
| RivalryRatio | 0.00556 | 0.145 | 0 | 5 |
| AllianceIndexATOP | 6.214 | 22.64 | 0 | 295 |
| MigrantStockDyad | 8,336 | 128,142 | 0 | 12,93M |
| TotalTrade | 449.7 | 5,671 | 0 | 590,656 |
| TotalEnergyTrade | 62.10 | 788.5 | 0 | 145,998 |
| FDIStockDyad | 508.6 | 10,517 | 0 | 1.085M |
| TotalRemittances | 19.26 | 265.2 | 0 | 24,886 |
| TotalAid | 3.249 | 55.68 | 0 | 11,119 |
| TotalArmsTrade | 2.401 | 39.00 | 0 | 4,452 |
| TotalTradePctGDPA | 0.297 | 3.352 | 0 | 1,935 |
| TotalEnergyTradePctGDPA | 0.000663 | 0.0129 | 0 | 2.919 |
| FDIIInstockBAPctGDPA | 0.00156 | 0.0765 | 0 | 18.03 |
| RemittancesBtoAPctGDPmerA | 0.000193 | 0.00319 | 0 | 0.410 |
| AidBPctGDPA | 0.000364 | 0.0463 | 0 | 26.89 |
| ArmsBAPctMilStockA | 0.343 | 8.068 | 0 | 2,054 |
| MigrantsBAPerPopA | 0.0515 | 0.641 | 0 | 46.78 |
| EmbassyAvgDyad99 | 1 | 0 | 1 | 1 |
| iEmbassy | 0.197 | 0.366 | 0 | 1 |
| TreatyIndex99 | 211.3B | 0 | 211.3B | 211.3B |
| iTreaties | 0.0274 | 0.119 | 0 | 3.148 |
| IGOIndex99 | 1.008M | 0 | 1.008M | 1.008M |
| iIGOs | 0.0579 | 0.148 | 0 | 4.793 |
| PolityAffinity99 | 20 | 0 | 20 | 20 |
| iPolityAffinity | 0.621 | 0.314 | 0 | 1 |
| MigrantStockDyadlog | 2.073 | 3.541 | 0 | 16.37 |
| MigrantStockDyadlog99 | 12.04 | 0 | 12.04 | 12.04 |
| iMigrants | 0.172 | 0.294 | 0 | 1.360 |
| BTATradeAgreementIndex99 | 33 | 0 | 33 | 33 |
| iBTAs | 0.0304 | 0.130 | 0 | 1.485 |
| iStratRiv | 0.00556 | 0.145 | 0 | 5 |
| AllianceIndexATOP99 | 95 | 0 | 95 | 95 |
| iAlliances | 0.0654 | 0.238 | 0 | 3.105 |
| TotalTradelog | 2.021 | 2.465 | 0 | 13.29 |
| TotalTradelog99 | 9.350 | 0 | 9.350 | 9.350 |
| iTrade | 0.216 | 0.264 | 0 | 1.421 |
| EnergyTradelog | 0.836 | 1.729 | 0 | 11.89 |

| | | | | |
|-----------------------|--------|-------|----------|--------|
| EnergyTradelog99 | 7.467 | 0 | 7.467 | 7.467 |
| iEnergy | 0.112 | 0.232 | 0 | 1.593 |
| FDIStocklog | 0.488 | 1.810 | 0 | 13.90 |
| FDIStocklog99 | 9.145 | 0 | 9.145 | 9.145 |
| iFDI | 0.0533 | 0.198 | 0 | 1.520 |
| TotalRemittanceslog | 0.407 | 1.163 | 0 | 10.12 |
| TotalRemittanceslog99 | 6.055 | 0 | 6.055 | 6.055 |
| iRemittances | 0.0673 | 0.192 | 0 | 1.672 |
| TotalAidlog | 0.197 | 0.721 | 0 | 9.316 |
| TotalAidlog99 | 4.360 | 0 | 4.360 | 4.360 |
| iAid | 0.0451 | 0.165 | 0 | 2.137 |
| ArmsTradeStocklog | 0.172 | 0.647 | 0 | 8.401 |
| ArmsTradeStocklog99 | 3.355 | 0 | 3.355 | 3.355 |
| iArmsTrade | 0.0514 | 0.193 | 0 | 2.504 |
| depTrade | 0.0464 | 0.524 | 0 | 302.5 |
| depEnergy | 0.0255 | 0.496 | 0 | 112.2 |
| depFDI | 0.0107 | 0.527 | 0 | 124.1 |
| depRemit | 0.0599 | 0.988 | 0 | 127.0 |
| depAid | 0.140 | 17.81 | 0 | 10,338 |
| depArms | 0.0986 | 2.319 | 0 | 590.2 |
| depMigrants | 0.0179 | 0.223 | 0 | 16.26 |
| Affinity | 6.376 | 6.685 | 1.51e-08 | 104.8 |
| Interaction | 6.403 | 8.868 | 0 | 71.92 |
| InterAff | 14.35 | 14.38 | 0.000160 | 162.2 |
| Dependence | 5.233 | 133.4 | 0 | 72,417 |
| MYRIAD | 5.137 | 12.90 | 0 | 1,520 |

Note: 2017 values have been manually calculated. As such, summary statistics are subject to minor changes.

TABLE A2: SUMMARY STATISTICS FOR MYRIAD 1.0 DATASET, NON-MISSING SCORES

| VARIABLES | Mean | Std. Dev. | Min. | Max. |
|---------------------------|----------|-----------|--------|---------|
| Year | 1993 | 15.23 | 1963 | 2017 |
| EmbassyAvgDyad | 0.268 | 0.406 | 0 | 1 |
| TreatyIndex | 7.217B | 28.95B | 0 | 6650B |
| IGOIndex | 73.26M | 171.5M | 0 | 4.834B |
| PolityAffinity | 12.43 | 6.283 | 0 | 20 |
| BTATradeAgreementIndex | 1.214 | 4.842 | 0 | 49 |
| RivalryRatio | 0.00808 | 0.175 | 0 | 5 |
| AllianceIndexATOP | 7.241 | 24.23 | 0 | 295 |
| MigrantStockDyad | 11,008 | 149,743 | 0 | 12.93M |
| TotalTrade | 582.1 | 6,551 | 0 | 590,656 |
| TotalEnergyTrade | 83.81 | 943.0 | 0 | 145,998 |
| FDIStockDyad | 674.5 | 11,068 | 0 | 1.085M |
| TotalRemittances | 26.51 | 311.6 | 0 | 24,886 |
| TotalAid | 4.586 | 67.16 | 0 | 11,119 |
| TotalArmsTrade | 2.676 | 36.61 | 0 | 4,452 |
| TotalTradePctGDPA | 0.354 | 3.909 | 0 | 1,935 |
| TotalEnergyTradePctGDPA | 0.000583 | 0.00570 | 0 | 1.018 |
| FDIIInstockBAPctGDPA | 0.00128 | 0.0165 | 0 | 4.549 |
| RemittancesBtoAPctGDPmerA | 0.000215 | 0.00350 | 0 | 0.410 |
| AidBPctGDPA | 0.000439 | 0.0563 | 0 | 26.89 |
| ArmsBAPctMilStockA | 0.397 | 7.178 | 0 | 1,251 |
| MigrantsBAPerPopA | 0.0451 | 0.454 | 0 | 38.22 |
| EmbassyAvgDyad99 | 1 | 0 | 1 | 1 |
| iEmbassy | 0.268 | 0.406 | 0 | 1 |
| TreatyIndex99 | 211.3B | 0 | 211.3B | 211.3B |
| iTreaties | 0.0342 | 0.137 | 0 | 3.148 |
| IGOIndex99 | 1.008M | 0 | 1.008M | 1.008M |
| iIGOs | 0.0727 | 0.170 | 0 | 4.793 |
| PolityAffinity99 | 20 | 0 | 20 | 20 |
| iPolityAffinity | 0.621 | 0.314 | 0 | 1 |
| MigrantStockDyadlog | 2.555 | 3.816 | 0 | 16.37 |
| MigrantStockDyadlog99 | 12.04 | 0 | 12.04 | 12.04 |
| iMigrants | 0.212 | 0.317 | 0 | 1.360 |
| BTATradeAgreementIndex99 | 33 | 0 | 33 | 33 |
| iBTAs | 0.0368 | 0.147 | 0 | 1.485 |
| iStratRiv | 0.00808 | 0.175 | 0 | 5 |
| AllianceIndexATOP99 | 95 | 0 | 95 | 95 |
| iAlliances | 0.0762 | 0.255 | 0 | 3.105 |
| TotalTradelog | 2.489 | 2.560 | 0 | 13.29 |
| TotalTradelog99 | 9.350 | 0 | 9.350 | 9.350 |
| iTrade | 0.266 | 0.274 | 0 | 1.421 |
| EnergyTradelog | 1.041 | 1.896 | 0 | 11.89 |
| EnergyTradelog99 | 7.467 | 0 | 7.467 | 7.467 |
| iEnergy | 0.139 | 0.254 | 0 | 1.593 |

| | | | | |
|-----------------------|---------|-------|----------|--------|
| FDIStocklog | 0.628 | 2.041 | 0 | 13.90 |
| FDIStocklog99 | 9.145 | 0 | 9.145 | 9.145 |
| iFDI | 0.0686 | 0.223 | 0 | 1.520 |
| TotalRemittanceslog | 0.531 | 1.320 | 0 | 10.12 |
| TotalRemittanceslog99 | 6.055 | 0 | 6.055 | 6.055 |
| iRemittances | 0.0877 | 0.218 | 0 | 1.672 |
| TotalAidlog | 0.265 | 0.838 | 0 | 9.316 |
| TotalAidlog99 | 4.360 | 0 | 4.360 | 4.360 |
| iAid | 0.0608 | 0.192 | 0 | 2.137 |
| ArmsTradeStocklog | 0.221 | 0.722 | 0 | 8.401 |
| ArmsTradeStocklog99 | 3.355 | 0 | 3.355 | 3.355 |
| iArmsTrade | 0.0659 | 0.215 | 0 | 2.504 |
| depTrade | 0.0554 | 0.611 | 0 | 302.5 |
| depEnergy | 0.0224 | 0.219 | 0 | 39.10 |
| depFDI | 0.00879 | 0.113 | 0 | 31.30 |
| depRemit | 0.0665 | 1.084 | 0 | 127.0 |
| depAid | 0.169 | 21.64 | 0 | 10,338 |
| depArms | 0.114 | 2.063 | 0 | 359.4 |
| depMigrants | 0.0157 | 0.158 | 0 | 13.28 |
| Interaction | 7.978 | 9.560 | 0 | 71.92 |
| Dependence | 5.958 | 157.8 | 0 | 72,417 |
| Affinity | 6.376 | 6.685 | 1.51e-08 | 104.8 |
| InterAff | 14.35 | 14.38 | 0.000160 | 162.2 |
| MYRIAD | 5.137 | 12.90 | 0 | 1,520 |

Note: 2017 values have been manually calculated. As such, summary statistics are subject to minor changes.

TABLE A3: MYRIAD 1.0 CALCULATION “CHEAT SHEET”

| | Interaction and Affinity | | | | A | B | A/B | C | D=(A/B)*C | | | | |
|---------------------------|--|-------|------|----------------------------------|---------------------------------|-----------------------------------|------|-----------|--------------------------|--------------------------------------|--|--|--|
| Original Source | Description | Start | End | Numerator | 99th percentile (Year>=2001) | subComponentName | %Wt | Component | Index | | | | |
| BACI/IMF DOTS | Total trade | 1948 | 2016 | TotalTrade | | iTrade | 20.0 | | Interaction sum of these | InterAff Affinity+Interaction | | | |
| BACI/IMF DOTS | Total energy trade | 1995 | 2016 | TotalEnergyTrade | | iEnergy | 8.0 | | | | | | |
| World Bank Migrati | Total remittances | 2010 | 2016 | TotalRemittances | | iRemittances | 4.0 | | | | | | |
| AidData | Total aid | 1962 | 2016 | TotalAid | | iAid | 4.0 | | | | | | |
| SIPRI | Total arms trade | 1950 | 2016 | TotalArmsTrade | | iArmsTrade | 6.0 | | | | | | |
| UNCTAD | Total FDI stock exchange | 2001 | 2016 | FDIStockDyad | | iFDI | 8.0 | | | | | | |
| Diplometrics | Embassies | 1960 | 2016 | EmbassyAvgDyad | | iEmbassy | 4.0 | | Affinity sum of these | | | | |
| Diplometrics | Shared treaties with weights | 1945 | 2016 | TreatyIndex | | iTreaties | 8.0 | | | | | | |
| Diplometrics | Common IGOs with weights | 1945 | 2016 | IGOIndex | | iIGOs | 12.0 | | | | | | |
| Polity IV | Polity affinity | 1945 | 2016 | PolityAffinity | | iPolityAffinity | 4.0 | | | | | | |
| UN Migration | Total migrant stock exchange | 1990 | 2016 | MigrantStockDyad | | iMigrants | 4.0 | | | | | | |
| WTO's Regional Trd | Bilateral trade agreements | 1945 | 2016 | BTATradeAgreementIndex | | iBTAs | 7.0 | | | | | | |
| Thompson Rivalry D | Strategic rivalry | 1945 | 2016 | RivalryRatio | | iStratRiv (see note below) | 4.0 | | | | | | |
| ATOP Dataset | Alliances | 1945 | 2016 | AllianceIndexATOP | | iAlliances | 7.0 | | | | | | |
| | | | | | | | 100 | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Dependence (or Dominance) | | | | | | | | | | | | | |
| Original Source | Description | Start | End | Numerator | 99th percentile (Year>=2001) | subComponentName | %Wt | Component | Index | | | | |
| BACI/IMF DOTS | Trade dependence | 1948 | 2016 | TotalTradePctGDPA | | depTrade | 35.0 | | Dependence sum of these | MYRIAD sqrt(InterAff*Dependence) | | | |
| BACI/IMF DOTS | Energy dependence | 1995 | 2016 | TotalEnergyTradePctGDPA | | depEnergy | 14.0 | | | | | | |
| UNCTAD | FDI dependence | 2001 | 2016 | FDIInstockBAPctGDPA | | depFDI | 14.0 | | | | | | |
| World Bank Migrati | Remittances dependence | 2010 | 2016 | RemittancesBtoAPctGDPmerA | | depRemit | 7.0 | | | | | | |
| AidData | Aid dependence | 1962 | 2016 | AidBPctGDPA | | depAid | 7.0 | | | | | | |
| SIPRI | Arms dependence | 1950 | 2016 | ArmsBAPctMilStockA | | depArms | 16.0 | | | | | | |
| UN Migration | Migrant dependence | 1990 | 2016 | MigrantsBAPerPopA | | depMigrants | 7.0 | | | | | | |
| | | | | | | | 100 | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Notes | | | | | | | | | | | | | |
| iStratRiv | The transformation for this one is different. Instead of calculating the 99th quantile, we directly truncate non-missing and non-zero values of variable RivalryRatio within range [0.2, 5] to get the subcomponent. | | | | | | | | | | | | |

Note: For the purposes of this analysis, we have manually calculated 2017 values for MYRIAD 1.0.

TABLE A4: SUMMARY STATISTICS FOR MYRIAD 2.0, ALL OBSERVATIONS (1963-2017)

| VARIABLES | Mean | Std. Dev. | Min. | Max. |
|-------------------------------|----------|-----------|------|---------|
| Year | 1993 | 15.33 | 1963 | 2017 |
| PolityAffinity | 8.630 | 7.754 | 0 | 20 |
| FhFreedomScoreAff | 17.24 | 31.68 | 0 | 100 |
| EmbassyAvgDyad | 0.197 | 0.366 | 0 | 1 |
| MultilateralTreatyIndex | 5.319B | 24.21B | 0 | 665B |
| IGOIndex | 55.01M | 145.2M | 0 | 4.834B |
| BilatTreatiesAllTime | 1.471 | 10.29 | 0 | 797 |
| AidAtoB5yr | 1.590 | 33.04 | 0 | 6,934 |
| AidBtoA5yr | 1.590 | 33.04 | 0 | 6,934 |
| AidAB5yrPctAllaidB | 0.439 | 4.461 | 0 | 100 |
| AidAB5yrPctGDPB | 0.000318 | 0.0319 | 0 | 14.61 |
| AllianceIndexATOP | 5.712 | 21.92 | 0 | 100 |
| TroopsAinB | 23.57 | 1,397 | 0 | 380,000 |
| TroopsBinA | 20.35 | 1,284 | 0 | 380,000 |
| TroopsABPerAllTroopsinB | 0.00280 | 0.0473 | 0 | 1 |
| TroopsABPer100kPopB | 0.347 | 20.78 | 0 | 4,114 |
| JointExerciseScore10Yr | 1.304 | 12.17 | 0 | 943.2 |
| ArmsExportsAtoB5yr | 7.089 | 146.3 | 0 | 18,167 |
| ArmsImportsAfromB5yr | 7.089 | 146.3 | 0 | 18,167 |
| ArmsImpBfromAPctArmsImpB5yr | 0.184 | 3.083 | 0 | 100 |
| ArmsABPctMilSpendB5yr | 0.0949 | 18.33 | 0 | 8,685 |
| TradeAgreementIndex | 1.003 | 4.299 | 0 | 49 |
| TotalTradePctTradeB | 0.547 | 2.752 | 0 | 100 |
| TotalTradePctGDPB | 0.258 | 3.916 | 0 | 1,935 |
| EnergyExportsAtoB | 20.29 | 489.5 | 0 | 119,513 |
| EnergyExportsBtoA | 20.29 | 489.5 | 0 | 119,513 |
| EnergyExpABPctTotEnergyTradeB | 0.248 | 2.794 | 0 | 99.72 |
| EnergyExportsABPctGDPB | 0.0158 | 0.677 | 0 | 291.9 |
| FDIOutstockAtoB | 133.8 | 4,117 | 0 | 645,098 |
| FDIInstockBtoA | 130.7 | 3,848 | 0 | 592,273 |
| FDIOutstockABPctTotalStockB | 0.169 | 2.589 | 0 | 100.0 |
| FDIOutstockABPctGDPB | 0.0706 | 4.374 | 0 | 1,364 |
| PortfolioInvestAB | 266.6 | 8,531 | 0 | 1.621M |
| PortfolioInvestBA | 266.6 | 8,531 | 0 | 1.621M |
| PortInvestABPctAllPortInvB | 0.182 | 2.816 | 0 | 100.0 |
| PortfolioInvestABPctGDPB | 0.0774 | 7.726 | 0 | 6,284 |
| RemittancesAtoB | 2.348 | 97.53 | 0 | 23,174 |
| RemittancesBtoA | 2.348 | 97.53 | 0 | 23,174 |
| RemittancesABPctAllRemitB | 0.000752 | 0.0154 | 0 | 1 |
| RemittancesAtoBPctGDPmerB | 0.00285 | 0.131 | 0 | 40.99 |
| MigrantStockAtoB | 2,815 | 59,885 | 0 | 12.05M |
| MigrantStockBtoA | 2,429 | 58,331 | 0 | 12.05M |
| MigStockABPerMigStockB | 0.00304 | 0.0304 | 0 | 1 |
| MigrantStockABPerPopB | 0.0250 | 0.454 | 0 | 46.78 |

| | | | | |
|----------------------------------|----------|---------|---------|---------|
| TouristsAtoB | 3,846 | 165,177 | 0 | 27.77M |
| TouristsBtoA | 3,846 | 165,177 | 0 | 27.77M |
| TouristsABPctAllTouristsB | 0.0661 | 1.339 | 0 | 98.99 |
| TouristsABPctPopulationB | 0.0773 | 8.771 | 0 | 3,714 |
| SharedReligionIndex | 0.126 | 0.198 | 0 | 1.059 |
| SharedLanguageNative | 0.135 | 0.342 | 0 | 1 |
| SharedLanguageOfficial | 0.148 | 0.355 | 0 | 1 |
| RivalryRatio | 0.00557 | 0.145 | 0 | 5 |
| TotalExports | 41,492 | 132,235 | 0 | 2.132M |
| TotalImports | 41,531 | 137,073 | 0 | 2.098M |
| FhFreedomScoreAffI | 66.77 | 24.08 | 0 | 100 |
| MultilateralTreatyIndexI | 5.831B | 25.29B | 0 | 665B |
| BilatTreatiesAllTimeI | 3.162 | 14.90 | 0 | 797 |
| RivalryRatioI | 0.00557 | 0.145 | 0 | 5 |
| AllianceIndexATOPI | 5.712 | 21.92 | 0 | 100 |
| TradeAgreementIndexI | 1.004 | 4.302 | 0 | 49 |
| MigrantStockAtoBI | 17,882 | 150,039 | 0 | 12.05M |
| MigrantStockBtoAI | 29,797 | 202,289 | 0 | 12.05M |
| SharedReligionIndexI | 0.148 | 0.207 | 0 | 1.059 |
| SharedLanguageNativeI | 0.150 | 0.357 | 0 | 1 |
| SharedLanguageOfficialI | 0.164 | 0.370 | 0 | 1 |
| EmbassyAvgDyadI | 0.197 | 0.366 | 0 | 1 |
| IGOIndexI | 58.36M | 148.9M | 0 | 4.834B |
| AidAtoB5yrI | 1.680 | 33.96 | 0 | 6,934 |
| AidBtoA5yrI | 1.680 | 33.96 | 0 | 6,934 |
| JointExerciseScore10YrI | 15.87 | 39.64 | 0 | 943.2 |
| TroopsAinBI | 2,022 | 14,173 | 0 | 380,000 |
| TroopsBinAI | 1,514 | 12,470 | 0 | 380,000 |
| ArmsExportsAtoB5yrI | 7.089 | 146.3 | 0 | 18,167 |
| ArmsImportsAfromB5yrI | 7.089 | 146.3 | 0 | 18,167 |
| TotalExportsI | 41,492 | 132,235 | 0 | 2.132M |
| TotalImportsI | 41,531 | 137,073 | 0 | 2.098M |
| EnergyExportsAtoBI | 114.2 | 1,157 | 5.40e-6 | 119,513 |
| EnergyExportsBtoAI | 114.2 | 1,157 | 5.40e-6 | 119,513 |
| FDIOutstockAtoBI | 3,020 | 19,338 | 0 | 645,098 |
| FDIInstockBtoAI | 2,590 | 16,946 | 0 | 592,273 |
| PortfolioInvestABI | 266.6 | 8,531 | 0 | 1.621M |
| PortfolioInvestBAI | 266.6 | 8,531 | 0 | 1.621M |
| RemittancesAtoBI | 15.67 | 251.6 | 0 | 23,174 |
| RemittancesBtoAI | 15.67 | 251.6 | 0 | 23,174 |
| TouristsAtoBI | 3,846 | 165,177 | 0 | 27.77M |
| TouristsBtoAI | 3,846 | 165,177 | 0 | 27.77M |
| AidAB5yrPctAllaidBI | 0.554 | 4.849 | 0 | 100 |
| AidAB5yrPctGDPBI | 0.000354 | 0.0336 | 0 | 14.61 |
| TroopsABPerAllTroopsinBI | 0.164 | 0.322 | 0 | 1 |
| TroopsABPer100kPopBI | 27.72 | 206.9 | 0 | 4,114 |
| ArmsImportsBfromAPctArmsImpB5yrI | 0.184 | 3.083 | 0 | 100 |
| ArmsImpBfromAPctArmsImpB5yrI | 0.184 | 3.083 | 0 | 100 |

| | | | | |
|---------------------------------|---------|--------|----------|-------|
| ArmsABPctMilSpendB5yrI | 0.0949 | 18.33 | 0 | 8,685 |
| TotalTradePctTradeBI | 0.750 | 3.200 | 1.92e-10 | 100 |
| TotalTradePctGDPBI | 0.387 | 4.791 | 1.06e-10 | 1,935 |
| EnergyExpABPctTotEnergyTradeBI | 1.398 | 6.506 | 7.41e-8 | 99.72 |
| EnergyExportsABPctGDPBI | 0.0906 | 1.617 | 2.60e-9 | 291.9 |
| FDIOutstockABPctTotalStockBI | 3.749 | 11.58 | 0 | 100.0 |
| FDIOutstockABPctGDPBI | 1.631 | 20.96 | 0 | 1,364 |
| PortInvestABPctAllPortInvBI | 0.511 | 4.696 | 0 | 100.0 |
| PortfolioInvestABPctGDPBI | 0.0820 | 7.953 | 0 | 6,284 |
| RemittancesABPctAllRemitBI | 0.00528 | 0.0406 | 0 | 1 |
| RemittancesAtoBPctGDPmerBI | 0.0210 | 0.355 | 0 | 40.99 |
| MigrantStockABPerMigrantStockBI | 0.0193 | 0.0745 | 0 | 1 |
| MigrantStockABPerPopBI | 0.159 | 1.135 | 0 | 46.78 |
| TouristsABPctAllTouristsBI | 0.0661 | 1.339 | 0 | 98.99 |
| TouristsABPctPopulationBI | 0.0773 | 8.771 | 0 | 3,714 |
| aPolityAffinity | 0.432 | 0.388 | 0 | 1 |
| aHumanRightsAffinity | 0.174 | 0.320 | 0 | 1 |
| aTreatiesMultilat | 0.0428 | 0.126 | 0 | 1 |
| aTreatiesBilat | 0.0174 | 0.0880 | 0 | 1 |
| aRivalry | 0.00111 | 0.0290 | 0 | 1 |
| aAlliances | 0.0601 | 0.231 | 0 | 1 |
| aTradeAgreements | 0.0209 | 0.0891 | 0 | 1 |
| aMigrantsOut | 0.00939 | 0.0753 | 0 | 1 |
| aMigrantsIn | 0.00554 | 0.0569 | 0 | 1 |
| aReligiousAffinity | 0.171 | 0.260 | 0 | 1 |
| aSharedLangNative | 0.135 | 0.342 | 0 | 1 |
| aSharedLangOfficial | 0.148 | 0.355 | 0 | 1 |
| iEmbassy | 0.197 | 0.366 | 0 | 1 |
| iIGOs | 0.102 | 0.164 | 0 | 1 |
| iAidOut | 0.00535 | 0.0536 | 0 | 1 |
| iAidIn | 0.00535 | 0.0536 | 0 | 1 |
| iJointExercises | 0.00748 | 0.0596 | 0 | 1 |
| iTroopsOut | 0.00178 | 0.0330 | 0 | 1 |
| iTroopsIn | 0.00182 | 0.0332 | 0 | 1 |
| iArmsExports | 0.00365 | 0.0439 | 0 | 1 |
| iArmsImports | 0.00365 | 0.0439 | 0 | 1 |
| iExports | 0.0700 | 0.176 | 0 | 1 |
| iImports | 0.0642 | 0.165 | 0 | 1 |
| iEnergyExports | 0.00896 | 0.0775 | 0 | 1 |
| iEnergyImports | 0.00896 | 0.0775 | 0 | 1 |
| iFDIOut | 0.00210 | 0.0355 | 0 | 1 |
| iFDIIIn | 0.00238 | 0.0381 | 0 | 1 |
| iPortfolioInvOut | 0.00221 | 0.0384 | 0 | 1 |
| iPortfolioInvIn | 0.00221 | 0.0384 | 0 | 1 |
| iRemittancesOut | 0.00262 | 0.0412 | 0 | 1 |
| iRemittancesIn | 0.00262 | 0.0412 | 0 | 1 |
| iTouristsOut | 0.00249 | 0.0402 | 0 | 1 |
| iTouristsIn | 0.00249 | 0.0402 | 0 | 1 |

| | | | | |
|----------------|---------|--------|---|-------|
| depAidRel | 0.00737 | 0.0654 | 0 | 1 |
| depAidAbs | 0.00620 | 0.0609 | 0 | 1 |
| depTroopsRel | 0.00280 | 0.0473 | 0 | 1 |
| depTroopsAbs | 0.00160 | 0.0323 | 0 | 1 |
| depArmsRel | 0.00257 | 0.0376 | 0 | 1 |
| depArmsAbs | 0.00397 | 0.0491 | 0 | 1 |
| depTradeRel | 0.0662 | 0.191 | 0 | 1 |
| depTradeAbs | 0.0510 | 0.168 | 0 | 1 |
| depEnergyRel | 0.0124 | 0.0885 | 0 | 1 |
| depEnergyAbs | 0.00991 | 0.0792 | 0 | 1 |
| depFDIRel | 0.00288 | 0.0398 | 0 | 1 |
| depFDIAbs | 0.00243 | 0.0367 | 0 | 1 |
| depPortInvRel | 0.00331 | 0.0431 | 0 | 1 |
| depPortInvAbs | 0.00284 | 0.0408 | 0 | 1 |
| depRemitRel | 0.00305 | 0.0435 | 0 | 1 |
| depRemitAbs | 0.00237 | 0.0394 | 0 | 1 |
| depMigrantsRel | 0.0112 | 0.0806 | 0 | 1 |
| depMigrantsAbs | 0.0102 | 0.0774 | 0 | 1 |
| depTouristsRel | 0.00335 | 0.0443 | 0 | 1 |
| depTouristsAbs | 0.00271 | 0.0422 | 0 | 1 |
| Affinity | 3.617 | 3.305 | 0 | 31.35 |
| Interaction | 2.708 | 4.311 | 0 | 55.74 |
| Dependence | 1.701 | 5.072 | 0 | 74.75 |
| InterAff | 6.325 | 6.717 | 0 | 80.72 |
| MYRIAD1 | 2.231 | 4.987 | 0 | 72.25 |
| MYRIAD2 | 8.026 | 10.44 | 0 | 145.1 |

Note: 2017 values have been manually calculated. As such, summary statistics are subject to minor changes.

TABLE A5: MYRIAD 2.0 CALCULATION “CHEAT SHEET”, INTERACTION AND AFFINITY COMPONENTS

Interaction and Affinity Index

| Description | Start | End | Dyadic# | Numerator | A | B 97.5th percentile (2001-2017) | A/B * C = | | Index |
|---------------------------|-------|------|---------|-------------------------|----------------------|------------------------------------|-----------|------|------------------------------------|
| | | | | | | | C | D | |
| Political Affinity | 1945 | 2017 | 18 | PolityAffinity | aPolityAffinity | 1.0 | 3.3 | | Affinity sum of these |
| Human Rights Affinity | 1945 | 2017 | 23 | FhFreedomScoreAff | aHumanRightsAffinity | 1.0 | 3.3 | | |
| Multilateral Treaties | 1945 | 2017 | 35 | MultilateralTreatyIndex | aTreatiesMultilat | 1.0 | 3.3 | | |
| Bilateral Treaties | 1946 | 2017 | 44 | BilatTreatiesAllTime | aTreatiesBilat | 2.0 | 6.7 | | |
| Strategic Rivalry | 1945 | 2016 | 62 | RivalryRatio | aRivalry | 1.0 | 3.3 | | |
| Alliances | 1945 | 2017 | 63 | AllianceIndexATOP | aAlliances | 1.0 | 3.3 | | |
| Trade Agreements | 1945 | 2017 | 86 | TradeAgreementIndex | aTradeAgreements | 1.0 | 3.3 | | |
| MigrantStock Out | 1990 | 2017 | 119 | MigrantStockAtoB | aMigrantsOut | 0.5 | 1.7 | | |
| MigrantStock In | 1990 | 2017 | 120 | MigrantStockBtoA | aMigrantsIn | 0.5 | 1.7 | | |
| Shared Religion Index | 1945 | 2017 | 128 | SharedReligionIndex | aReligiousAffinity | 1.0 | 3.3 | | |
| Shared Language, Native | 1945 | 2017 | 129 | SharedLanguageNative | aSharedLangNative | 0.5 | 1.7 | | |
| Shared Language, Official | 1945 | 2017 | 130 | SharedLanguageOfficial | aSharedLangOfficial | 0.5 | 1.7 | | |
| Embassies | 1960 | 2017 | 32 | EmbassyAvgDyad | iEmbassy | 1.0 | 3.3 | | Interaction sum of these |
| Common IGOs | 1945 | 2017 | 38 | IGOIndex | iIGOs | 3.0 | 10.0 | | |
| Total Aid Out | 1962 | 2017 | 48 | AidAtoB5yr | iAidOut | 0.5 | 1.7 | | |
| Total Aid In | 1962 | 2017 | 49 | AidBtoA5yr | iAidIn | 0.5 | 1.7 | | |
| Joint Military Exercises | 2002 | 2017 | 70 | JointExerciseScore10Yr | iJointExercises | 1.0 | 3.3 | | |
| Troop Deployments Out | 1980 | 2017 | 66 | TroopsAinB | iTroopsOut | 1.0 | 3.3 | | |
| Troop Deployments In | 1980 | 2017 | 67 | TroopsBinA | iTroopsIn | 1.0 | 3.3 | | |
| Arms exports | 1950 | 2017 | 74 | ArmsExportsAtoB5yr | iArmsExports | 0.5 | 1.7 | | |
| Arms Imports | 1950 | 2017 | 75 | ArmsImportsAfromB5yr | iArmsImports | 0.5 | 1.7 | | |
| Total Exports | 1948 | 2017 | 90 | Total Exports | iExports | 2.0 | 6.7 | | |
| Total Imports | 1948 | 2017 | 91 | Total Imports | iImports | 2.0 | 6.7 | | |
| Energy Exports | 1995 | 2017 | 95 | EnergyExportsAtoB | iEnergyExports | 0.5 | 1.7 | | |
| Energy Imports | 1995 | 2017 | 96 | EnergyExportsBtoA | iEnergyImports | 0.5 | 1.7 | | |
| FDI Outstock | 2001 | 2017 | 100 | FDIOutstockAtoB | iFDIOut | 1.0 | 3.3 | | |
| FDI Instock | 2001 | 2017 | 101 | FDIInstockBtoA | iFDIn | 1.0 | 3.3 | | |
| Portfolio Investment Out | 1945 | 2017 | 107 | PortfolioInvestAB | iPortfolioInvOut | 0.5 | 1.7 | | |
| Portfolio Investment In | 1945 | 2017 | 108 | PortfolioInvestBA | iPortfolioInvIn | 0.5 | 1.7 | | |
| Remittances Out | 2010 | 2017 | 112 | RemittancesAtoB | iRemittancesOut | 0.5 | 1.7 | | |
| Remittances In | 2010 | 2017 | 113 | RemittancesBtoA | iRemittancesIn | 0.5 | 1.7 | | |
| Tourists Out | 1995 | 2017 | 124 | TouristsAtoB | iTouristsOut | 0.5 | 1.7 | | |
| Tourists In | 1995 | 2017 | 125 | TouristsBtoA | iTouristsIn | 0.5 | 1.7 | 30.0 | 100 |

TABLE A6: MYRIAD 2.0 CALCULATION “CHEAT SHEET”, DEPENDENCE COMPONENT AND MYRIAD SCORE

Dependence Index

| Description | Years | Numerator | 97.5th percentile (2001-2017) | | ComponentName | Wt | %Wt | Dependence sum of these | MYRIAD | MYRIAD2 |
|---|-----------|-----------|---------------------------------|-------------------|----------------|------|------|-------------------------|--------|---------|
| | | | 2017) | percentile (2001- | | | | | | |
| Aid dependence, relative | 1962 2017 | 53 | AidAB5yrPctAllaidB | | depAidRel | 1.0 | 5.6 | | | |
| Aid dependence, absolute | 1960 2017 | 54 | AidAB5yrPctGDPB | | depAidAbs | 1.0 | 5.6 | | | |
| Troop presence, relative | 1993 2017 | 68 | TroopsABPerAllTroopsinB | | depTroopsRel | 1.0 | 5.6 | | | |
| Troop presence, absolute | 1993 2017 | 69 | TroopsABPer100kPopB | | depTroopsAbs | 1.0 | 5.6 | | | |
| Arms dependence, relative | 1950 2017 | 79 | ArmsImportsBfromAPctArmsImpB5yr | | depArmsRel | 1.0 | 5.6 | | | |
| Arms dependence, relative | 1945 2017 | 80 | ArmsABPctMilSpendB5yr | | depArmsAbs | 1.0 | 5.6 | | | |
| Trade dependence, relative | 1948 2017 | 92 | TotalTradePctTradeB | | depTradeRel | 2.0 | 11.1 | | | |
| Trade dependence, absolute | 1960 2017 | 93 | TotalTradePctGDPB | | depTradeAbs | 2.0 | 11.1 | | | |
| Energy dependence, relative | 1995 2017 | 97 | EnergyExpABPctTotEnergyTradeB | | depEnergyRel | 1.0 | 5.6 | | | |
| Energy dependence, absolute | 1995 2017 | 98 | EnergyExportsABPctGDPB | | depEnergyAbs | 1.0 | 5.6 | | | |
| FDI dependence, relative | 2001 2017 | 102 | FDIOutstockABPctTotalStockB | | depFDIRel | 1.0 | 5.6 | | | |
| FDI dependence, absolute | 2001 2017 | 103 | FDIOutstockABPctGDPB | | depFDIAbs | 1.0 | 5.6 | | | |
| Portfolio investment dependence, relative | 1945 2017 | 109 | PortfolioInvestABPctAllPortInvB | | depPortInvRel | 0.5 | 2.8 | | | |
| Portfolio investment dependence, absolute | 1960 2017 | 110 | PortfolioInvestABPctGDPB | | depPortInvAbs | 0.5 | 2.8 | | | |
| Remittance dependence, relative | 2010 2017 | 114 | RemittancesABPctAllRemitB | | depRemitRel | 0.5 | 2.8 | | | |
| Remittance dependence, absolute | 2010 2017 | 115 | RemittancesAtoBPerGDPmerB | | depRemitAbs | 0.5 | 2.8 | | | |
| Migrant dependence, relative | 1990 2017 | 121 | MigrantStockABPerMigrantStockB | | depMigrantsRel | 0.5 | 2.8 | | | |
| Migrant dependence, absolute | 1990 2017 | 122 | MigrantStockABPerPopB | | depMigrantsAbs | 0.5 | 2.8 | | | |
| Tourist dependence, relative | 1995 2017 | 126 | TouristsABPctAllTouristsB | | depTouristsRel | 0.5 | 2.8 | | | |
| Tourist dependence, absolute | 1995 2017 | 127 | TouristsABPctPopulationB | | depTouristsAbs | 0.5 | 2.8 | | | |
| | | | | | | 18.0 | 100 | | | |

TABLE A7: SUMMARY STATISTICS FOR THE FBIC DATASET, ALL OBSERVATIONS

| VARIABLES | Mean | Std. Dev. | Min. | Max. |
|--------------------------------|---------|-----------|-----------|---------|
| year | 1993 | 14.94 | 1963 | 2017 |
| lor_avg | 0.170 | 0.346 | 0 | 1 |
| igo_weights | 196.3 | 105.0 | -0.171 | 616.0 |
| ln_totaltrade | 2.120 | 2.427 | 9.12e-09 | 13.29 |
| allianceindex_cow | 4.169 | 19.50 | 0 | 110 |
| tradeagreementindex | 0.785 | 3.797 | 0 | 49 |
| aid_a_allaid_b | 0.370 | 4.507 | 0 | 100 |
| aid_a_gdp_b | 0.00857 | 0.215 | 0 | 78.70 |
| totaltrade_per_trade_b | 0.466 | 2.627 | 0 | 100 |
| totaltrade_per_gdp_b | 0.204 | 3.509 | 0 | 1,935 |
| arms_import_stock_per_tot_b | 0.385 | 4.528 | 0 | 100 |
| arms_import_stock_per_milstock | 0.179 | 6.961 | 0 | 3,318 |
| arms_total_stock_ln | 0.186 | 0.953 | 0 | 10.16 |
| lor_avg_total | 335.355 | 0 | 335.355 | 335.355 |
| norm_lor_avg | 0.170 | 0.346 | 0 | 1 |
| norm_lor_avg_ma | 0.166 | 0.340 | 0 | 1 |
| igo_weights_total | 359.6M | 0 | 359.6M | 359.6M |
| norm_igo_weights | 0.183 | 0.0979 | -0.000160 | 0.574 |
| norm_igo_weights_ma | 0.179 | 0.0973 | -1.23e-05 | 0.571 |
| tradeagreementindex_total | 1.723M | 0 | 1.723M | 1.723M |
| norm_tradeagreementindex | 0.153 | 0.739 | 0 | 9.536 |
| norm_tradeagreementindex_ma | 0.147 | 0.716 | 0 | 9.536 |
| ln_totaltrade_total | 2.871M | 0 | 2.871M | 2.871M |
| norm_ln_totaltrade | 0.248 | 0.283 | 1.07e-09 | 1.552 |
| norm_ln_totaltrade_ma | 0.242 | 0.279 | 1.07e-09 | 1.550 |
| allianceindextotal | 9.156M | 0 | 9.156M | 9.156M |
| norm_allianceindex | 0.153 | 0.714 | 0 | 4.029 |
| norm_allianceindex_ma | 0.151 | 0.706 | 0 | 4.029 |
| arms_total_stock_ln_tot | 408,148 | 0 | 408,148 | 408,148 |
| norm_arms_total_stock_ln | 0.153 | 0.783 | 0 | 8.349 |
| norm_arms_total_stock_ln_ma | 0.150 | 0.774 | 0 | 8.309 |
| bandwidth_nonorm | 0.241 | 0.310 | 2.51e-06 | 3.016 |
| economicbandwidth | 0.115 | 0.176 | 3.73e-10 | 1.842 |
| securitybandwidth | 0.0316 | 0.118 | 0 | 1.116 |
| politicalbandwidth | 0.0550 | 0.0482 | -2.33e-06 | 0.219 |
| bandwidth | 0.0798 | 0.103 | 0 | 1 |
| totaltrade_per_trade_b_ma | 0.464 | 2.590 | 0 | 100 |
| totaltrade_per_trade_b_ma_ln | 0.162 | 0.448 | 0 | 4.615 |
| totaltrade_per_gdp_b_ma | 0.201 | 3.271 | 0 | 1,763 |
| totaltrade_per_gdp_b_ma_ln | 0.0814 | 0.292 | 0 | 7.475 |
| aid_a_gdp_b_ma | 0.00840 | 0.180 | 0 | 41.90 |
| aid_a_gdp_b_ma_ln | 0.00499 | 0.0621 | 0 | 3.759 |
| aid_a_allaid_b_ma | 0.361 | 4.098 | 0 | 100 |
| aid_a_allaid_b_ma_ln | 0.0524 | 0.364 | 0 | 4.615 |

| | | | | |
|----------------------------------|---------|--------|---|-------|
| arms_import_stock_per_tot_b_ma | 0.381 | 4.457 | 0 | 100 |
| arms_import_stock_tot_b_ma_ln | 0.0474 | 0.364 | 0 | 4.615 |
| arms_import_stock_milstock_ma | 0.184 | 7.119 | 0 | 3,318 |
| arms_import_stock_milstock_ma_ln | 0.0232 | 0.230 | 0 | 8.107 |
| depend_ln | 0.0645 | 0.212 | 0 | 3.937 |
| economicdependence | 0.0560 | 0.173 | 0 | 3.062 |
| securitydependence | 0.00848 | 0.0674 | 0 | 1.411 |
| dependence | 0.0164 | 0.0537 | 0 | 1 |
| influence_nonnorm | 0.00553 | 0.0221 | 0 | 0.557 |
| influence | 0.00993 | 0.0397 | 0 | 1 |

Note: 2017 values have been manually calculated. As such, summary statistics are subject to minor changes.

TABLE A8: SUMMARY STATISTICS FOR THE FBIC DATASET, NON-MISSING SCORES

| VARIABLES | Mean | Std. Dev. | Min. | Max. |
|--------------------------------|---------|-----------|-----------|---------|
| year | 1995 | 14.36 | 1963 | 2017 |
| lor_avg | 0.258 | 0.402 | 0 | 1 |
| igo_weights | 228.7 | 94.07 | -0.164 | 616.0 |
| ln_totaltrade | 2.204 | 2.463 | 1.01e-08 | 13.29 |
| allianceindex_cow | 6.916 | 24.76 | 0 | 110 |
| tradeagreementindex | 1.232 | 4.824 | 0 | 49 |
| aid_a_allaid_b | 0.566 | 5.353 | 0 | 100 |
| aid_a_gdp_b | 0.0144 | 0.279 | 0 | 78.70 |
| totaltrade_per_trade_b | 0.734 | 3.142 | 0 | 100 |
| totaltrade_per_gdp_b | 0.349 | 4.600 | 0 | 1,935 |
| arms_import_stock_per_tot_b | 0.620 | 5.655 | 0 | 100 |
| arms_import_stock_per_milstock | 0.280 | 8.108 | 0 | 3,318 |
| arms_total_stock_ln | 0.309 | 1.210 | 0 | 10.16 |
| lor_avg_total | 335.355 | 0 | 335.355 | 335.355 |
| norm_lor_avg | 0.258 | 0.402 | 0 | 1 |
| norm_lor_avg_ma | 0.253 | 0.395 | 0 | 1 |
| igo_weights_total | 359.6M | 0 | 359.6M | 359.6M |
| norm_igo_weights | 0.213 | 0.0877 | -0.000153 | 0.574 |
| norm_igo_weights_ma | 0.210 | 0.0874 | 9.33e-06 | 0.571 |
| tradeagreementindex_total | 1.723M | 0 | 1.723eM | 1.723M |
| norm_tradeagreementindex | 0.240 | 0.939 | 0 | 9.536 |
| norm_tradeagreementindex_ma | 0.231 | 0.911 | 0 | 9.536 |
| ln_totaltrade_total | 2.871M | 0 | 2.871M | 2.871eM |
| norm_ln_totaltrade | 0.257 | 0.288 | 1.18e-09 | 1.552 |
| norm_ln_totaltrade_ma | 0.252 | 0.283 | 1.18e-09 | 1.550 |
| allianceindextotal | 9.156M | 0 | 9.156M | 9.156M |
| norm_allianceindex | 0.253 | 0.907 | 0 | 4.029 |
| norm_allianceindex_ma | 0.250 | 0.898 | 0 | 4.029 |
| arms_total_stock_ln_tot | 408,148 | 0 | 408,148 | 408,148 |
| norm_arms_total_stock_ln | 0.254 | 0.994 | 0 | 8.349 |
| norm_arms_total_stock_ln_ma | 0.250 | 0.983 | 0 | 8.309 |
| economicbandwidth | 0.120 | 0.181 | 3.90e-08 | 1.842 |
| securitybandwidth | 0.0525 | 0.149 | 0 | 1.116 |
| politicalbandwidth | 0.0677 | 0.0504 | 1.77e-06 | 0.219 |
| totaltrade_per_trade_b_ma | 0.730 | 3.098 | 6.41e-11 | 100 |
| totaltrade_per_trade_b_ma_ln | 0.261 | 0.541 | 6.41e-11 | 4.615 |
| totaltrade_per_gdp_b_ma | 0.345 | 4.286 | 0 | 1,763 |
| totaltrade_per_gdp_b_ma_ln | 0.139 | 0.372 | 0 | 7.475 |
| aid_a_gdp_b_ma | 0.0142 | 0.235 | 0 | 41.90 |
| aid_a_gdp_b_ma_ln | 0.00843 | 0.0803 | 0 | 3.759 |
| aid_a_allaid_b_ma | 0.554 | 4.829 | 0 | 100 |
| aid_a_allaid_b_ma_ln | 0.0855 | 0.456 | 0 | 4.615 |
| arms_import_stock_per_tot_b_ma | 0.614 | 5.576 | 0 | 100 |
| arms_import_stock_tot_b_ma_ln | 0.0779 | 0.462 | 0 | 4.615 |

| | | | | |
|----------------------------------|---------|--------|----------|-------|
| arms_import_stock_milstock_ma | 0.287 | 8.323 | 0 | 3,318 |
| arms_import_stock_milstock_ma_ln | 0.0383 | 0.292 | 0 | 8.107 |
| depend_ln | 0.107 | 0.267 | 0 | 3.937 |
| economicdependence | 0.0927 | 0.218 | 0 | 3.062 |
| securitydependence | 0.0140 | 0.0857 | 0 | 1.411 |
| dependence | 0.0271 | 0.0677 | 0 | 1 |
| bandwidth_nonorm | 0.241 | 0.310 | 2.51e-06 | 3.016 |
| bandwidth | 0.0798 | 0.103 | 0 | 1 |
| influence_nonnorm | 0.00553 | 0.0221 | 0 | 0.557 |
| influence | 0.00993 | 0.0397 | 0 | 1 |

Influence Cheat Sheet

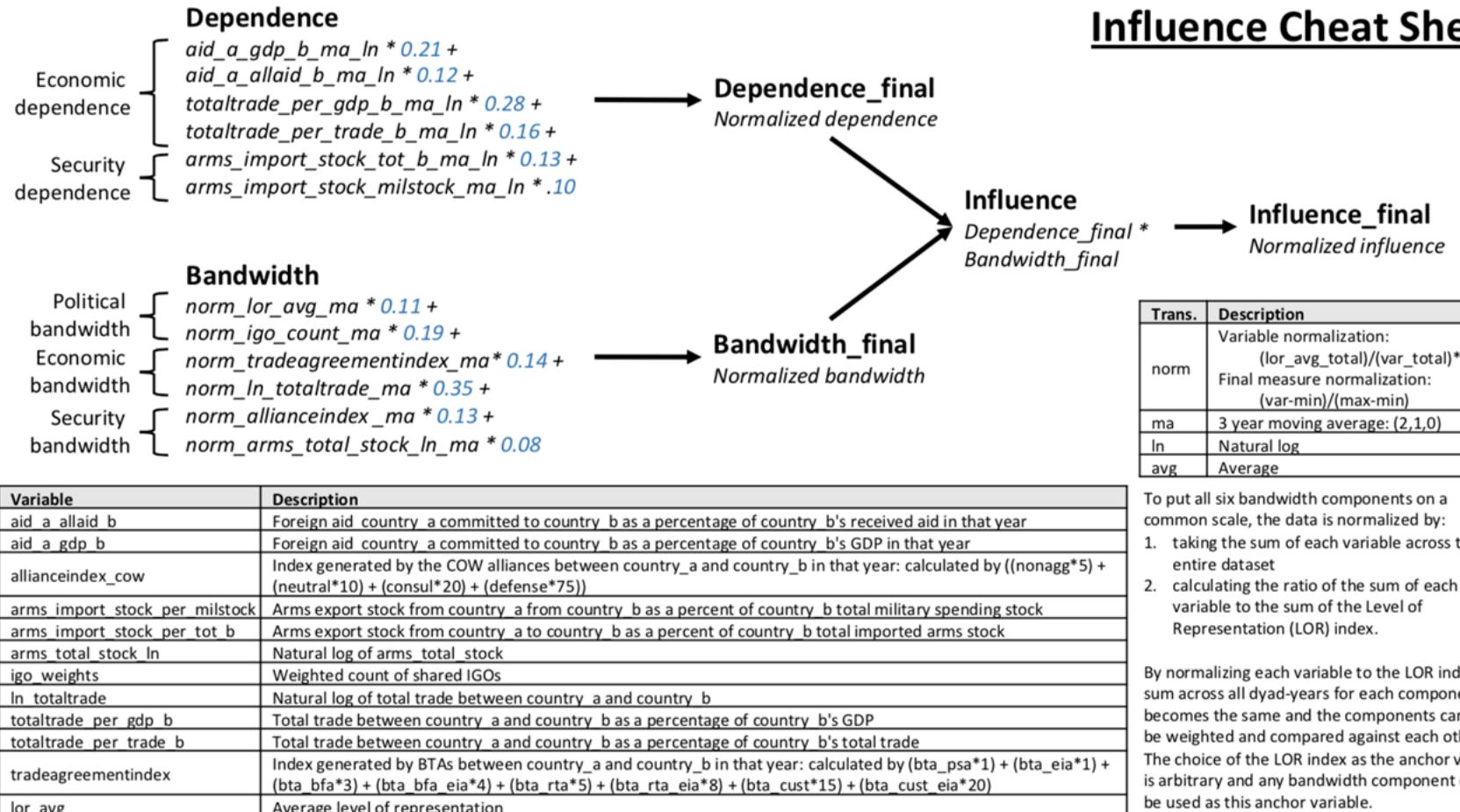


FIGURE A1: FBIC CALCULATION “CHEAT SHEET”

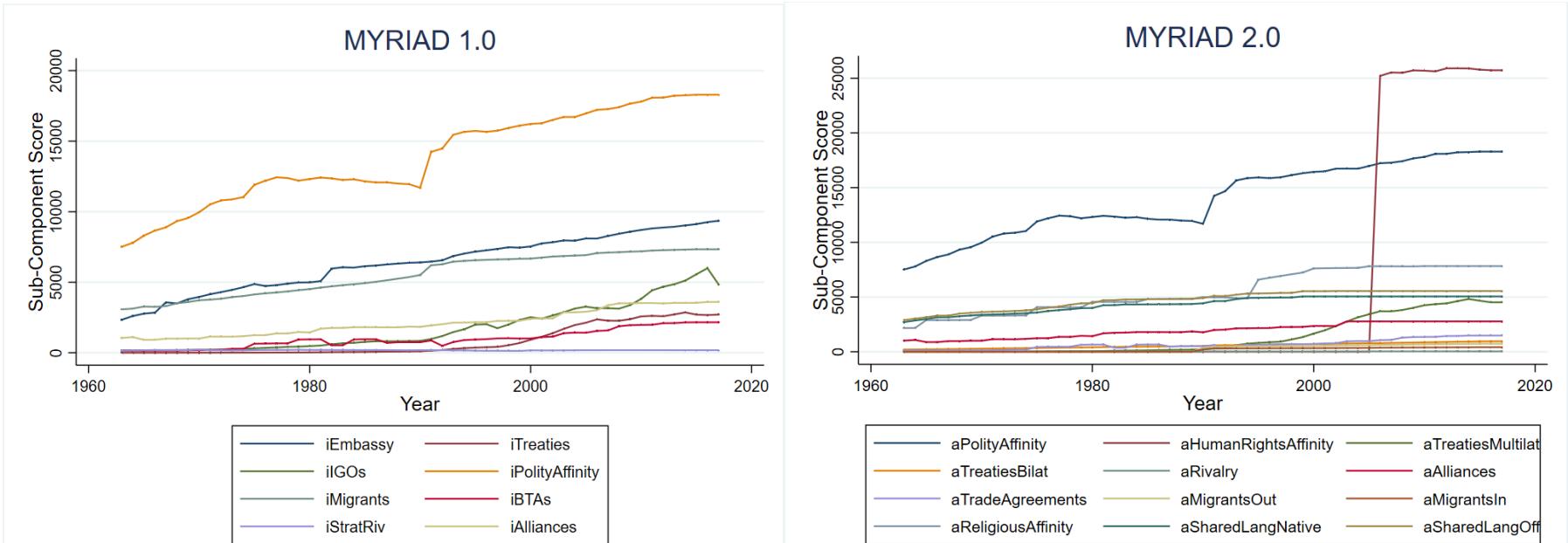


Figure A2. SIDE-BY-SIDE COMPARISON OF THE SUM OF MYRIAD 1.0 AND MYRIAD 2.0 AFFINITY SUB-COMPONENTS

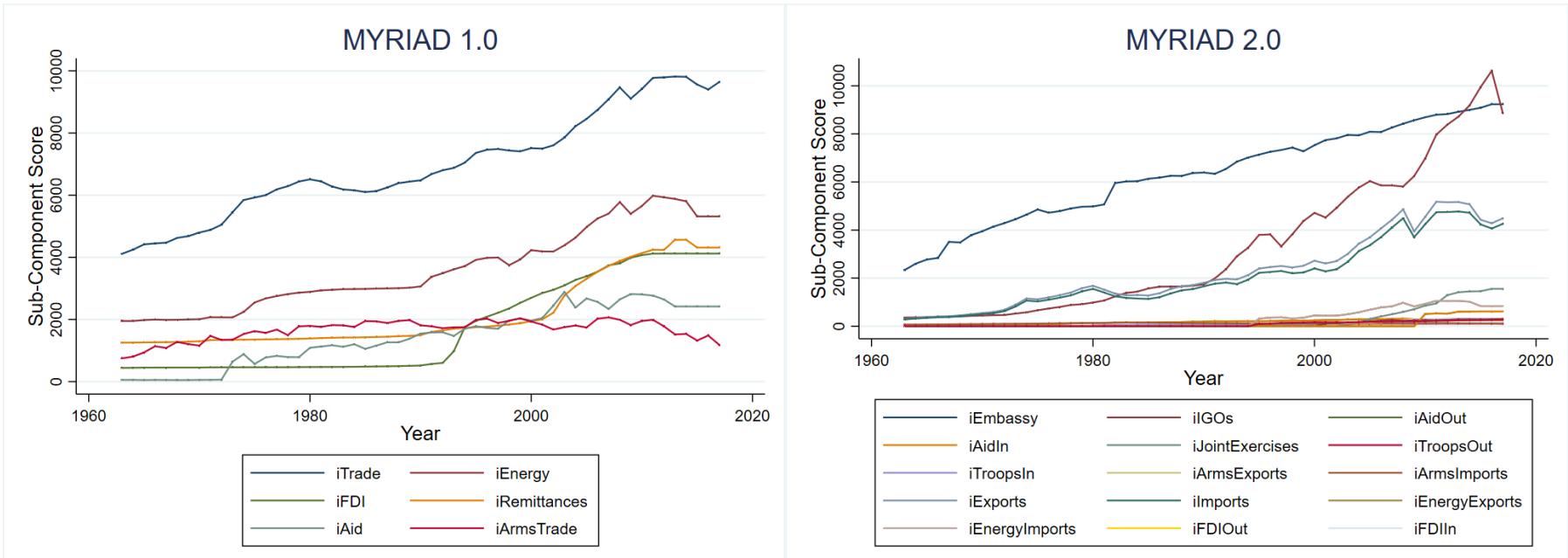


Figure A3. SIDE-BY-SIDE COMPARISON OF THE SUM OF MYRIAD 1.0 AND MYRIAD 2.0 INTERACTION SUB-COMPONENTS

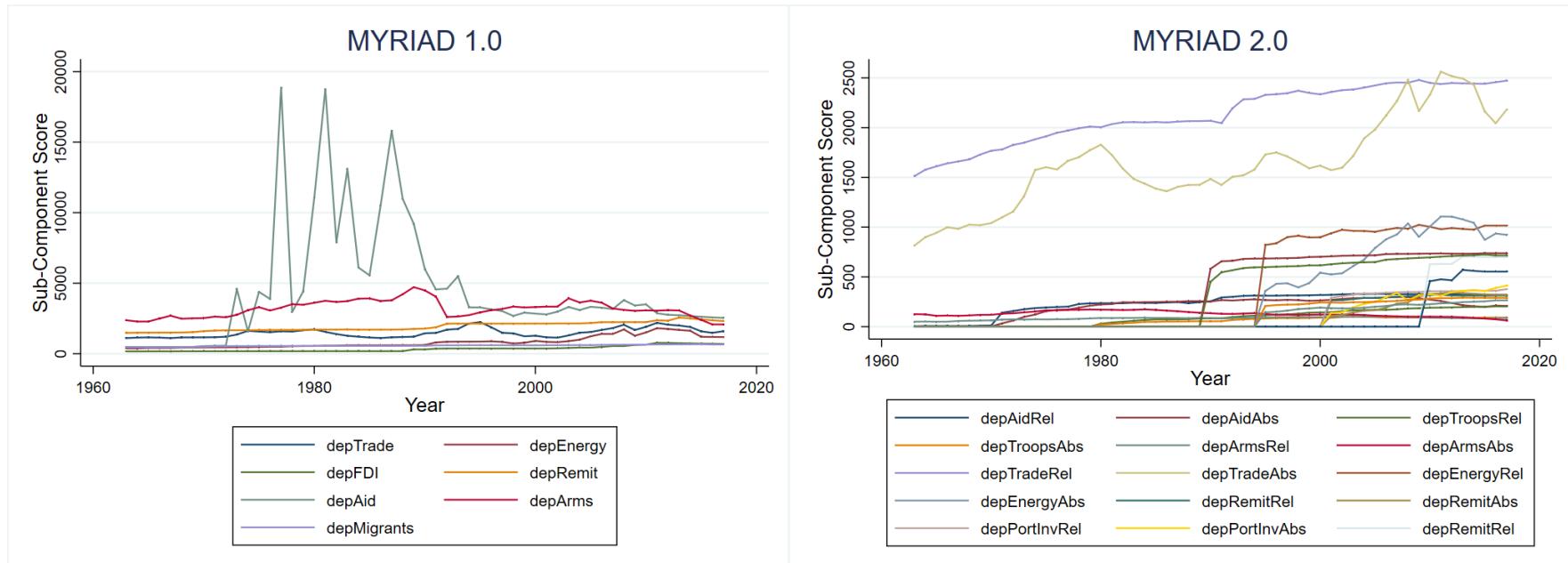


Figure A4. SIDE-BY-SIDE COMPARSION OF THE SUM OF MYRIAD 1.0 AND MYRIAD 2.0 DEPENDENCE SUB-COMPONENTS

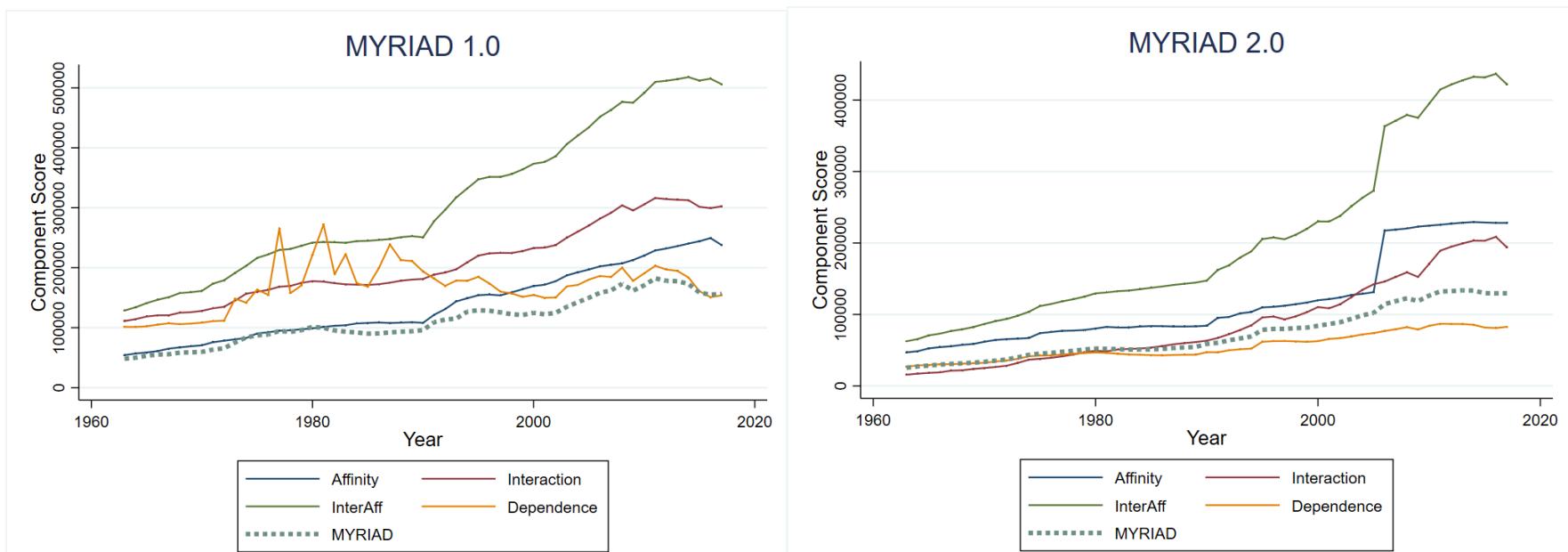
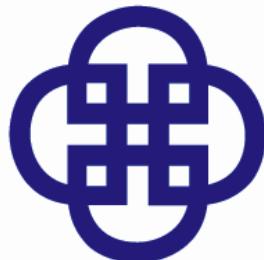


Figure A5. SIDE-BY-SIDE COMPARSION OF THE SUM OF MYRIAD 1.0 AND MYRIAD 2.0 COMPONENTS AND TOTAL SCORE

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JOSEF KORBEL SCHOOL OF INTERNATIONAL STUDIES | UNIVERSITY OF DENVER



DIPLOMETRICS

**QUALITATIVE VALIDATION STUDY OF
INFLUENCE INDICES:**

**FORMAL RECOGNITION OF KOSOVO IN THE
INTERNATIONAL COMMUNITY**

MARCH 2019

AUSTIN MATTHEWS

Chapter 2

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Executive Summary

1. This study compares and contrasts the performance of three indices measuring interstate influence within the framework of states choosing to formally recognize or reject the unilaterally declared sovereignty of Kosovo from Serbia. The three influence indices included in these analyses are: the Foreign Bilateral Influence Capacity (FBIC) Index, Merged Yearly Rational Interaction Affinity & Dependence (MYRIAD) 1.0, and MYRIAD 2.0.
2. Influence levels for every member-state of the United Nations (minus Russia, Serbia, and the United States) are compared in order to analyze three hypotheses created to study this event. We predicted that states with higher American influence would recognize Kosovo, states with higher Russian influence would reject Kosovo, and a few states with higher American influence as well as domestic separatist movements would also reject Kosovo.
3. We find evidence that the FBIC Index performed best at predicting the states recognizing Kosovo through comparison of their levels of American and Russian influence. The three indices performed comparably at predicting the states rejecting Kosovo with higher Russian influence. A comparative examination of predictions on outliers found that the FBIC Index performed best when there were disputed readings between the three indices.
4. We conclude that while MYRIAD 2.0 has superior sample coverage and the three indices perform generally similar in one category, the superior performance of the FBIC Index at reflecting higher American influence in pro-sovereignty states gives that index an advantage in this case study.

Index Performance Summary Statistics

| Index Name | FBIC | MYRIAD 1.0 | MYRIAD 2.0 |
|--------------------|-------------|-------------------|-------------------|
| Sample Coverage | 83.80% | 82.39% | 99.30% |
| Recognize Accuracy | 94.23% | 81.40% | 86.36% |
| Reject Accuracy | 48.39% | 54.84% | 48.39% |
| Total Outliers | 22/142 | 30/142 | 31/142 |

Introduction

The Republic of Kosovo is a partially recognized state in the central Balkans region primarily comprised of ethnic Kosovar Albanians, who overwhelmingly adhere to the Islamic faith. Kosovo has a long history as a disputed territory and throughout the 19th and 20th Century existed under the suzerainty of the Ottoman Empire or as a Serbian province with varying levels of autonomy under Yugoslavia (both the monarchy and the socialist republic). Following the breakup of Yugoslavia in the 1990s, control of Kosovo remained with Serbia, but there was unrest amongst the ethnically Albanian population to separate and potentially become annexed as a province of Albania. The Serb government in Belgrade, reeling from the Yugoslav Wars and still led by ardent nationalist Slobodan Milosevic, began a campaign of brutal repression against Kosovar Albanians that was coupled with local militarization.

The period of 1998-1999 witnessed open violence between Serbs and Kosovar Albanians, supported by Serbia and Albania respectively, which involved war crimes on both sides. The hostilities came to a halt after the military intervention of the North Atlantic Treaty Organization (NATO) in support of Kosovo, having previously sided with anti-Serb factions in Bosnia during that phase of the Balkan conflicts. NATO engaged in an air campaign against the Serbian military and bolstered the Kosovo Liberation Army (KLA) separatist group and its other Albanian paramilitary affiliates. A reluctant ceasefire was struck as the Serbian military withdrew from Kosovo, but Belgrade refused to recognize it as anything more than a province in rebellion.

From 1999-2007 Kosovo de facto operated as a self-governing province within Serbia, protected by a continuous NATO presence, against the protests of the Belgrade government. Following the parliamentary elections of November 2007, a coalition government entered leadership in Kosovo on the mandate of their intention to declare full independence from Serbia. The election turnout was low due in part to a boycott from Kosovar Serbs, but the government carried through with its declared intention. Three months later, after rejecting a compromise plan from the UN Special Envoy, Kosovo's Assembly declared territorial sovereignty and drafted articles of independence for self-governance.

On 17 February 2008, the Assembly of Kosovo unilaterally declared its independence as a sovereign state from Serbia. International reaction to Kosovo's declaration of independence varied significantly. The National Assembly of Serbia pressed their claim to Kosovo and condemned the declaration as illegal, affirmed by the national Constitutional Court while citing prior UN declarations. Serbia's rejection was supported by Russia, who has a historical association with its fellow Orthodox Slav nation and has in the past dealt with its own ethnic separatist crises. Many other states with similar separatist issues also fell on the side of Serbia, such as China, Spain, Morocco, and Mexico.

The main supporters of Kosovo's independence came from the NATO alliance member-states, who merged their military support with international political backing. The United States and United Kingdom recognized Kosovo's de jure sovereignty the day after their declaration of independence, followed in the subsequent days by others including Canada, Germany, Italy, and Belgium. Although there have been many states that have rebuked or simply not addressed Kosovo's independence, around 113 of the 193 United Nations member states have extended formal recognition to the Pristina government.

Methods and Hypotheses

This study will examine the formal recognition of Kosovo as a de jure sovereign state throughout the global community from 2008 (year of Kosovo's declaration of independence) to the present. While this issue at the micro level is a conflict between Serbia and Kosovo, at the macro level the main influencers in the issue can be argued to be Russia (as a proxy for Serbia) and the United States (as a proxy for Kosovo). As such, we will examine the influence of Russia and the United States over tertiary states, arguing that the state with the highest influence will determine the recognition status of that state in regards to Kosovo.

The potential outliers in this hypothesis are those with their own issue of ethnic separatism, which will fall on the side of non-recognition of Kosovo, but not as an effect of Russian influence. Examples of these states include Greece, Mexico, and Spain. They maintain a vested interest in international non-recognition of ethnic separatist states stemming from their own domestic concerns, although Russian influence in these states are expected to be low due to their alliance or geo-

political alignments. There is also the potentiality that there are many states detached from the issue either by geography or means, which have not extended formal recognition, but are not fundamentally opposed to a sovereign Kosovo. As such, examining the “Russian” side of the conflict will require separating non-participatory states from those that have formally rejected the recognition of Kosovo along ideological or principle lines.

Based on the brief survey of the case’s history and the general specifications of how we intend to model influence, we generate a series of hypotheses to test our expectations about what states will recognize the sovereignty of Kosovo and which will not. There are four hypotheses that can be tested using our global sample and based on the influence that our hinge states (United States and Russia) exert over each observed state. With the exception of outlier states discussed in the third hypothesis, we expect that the hinge state with the higher level of influence vis-a-vis the other within a tertiary state will decide their action. For states with active separatist movements, we expect them to reject Kosovo, not out of influence levels but because they wish to delegitimize their own domestic separatist movement on the international stage. Below we outline three hypotheses that will allow us to examine these considerations about who recognizes the independence of Kosovo, who does not, and who has withheld a decision.

Hypothesis 1: States with higher American domestic influence than Russian will recognize the sovereignty of Kosovo.

Hypothesis 2: States with higher Russian domestic influence than American will reject the sovereignty of Kosovo.

Hypothesis 3: States with an internal separatist movement will reject the sovereignty of Kosovo, regardless of American or Russian domestic influence.

Out of the 193 member-states recognized by the United Nations, this study will examine the comparative influence levels of Russia and the United States within 193 of them. Both of those states are omitted as the main actors in the study, along with Serbia, as they obviously support their own vision of maintaining territorial integrity regardless of who has higher influence over them. Of the 190 possible sample states to analyze, 142 have taken a firm position on the Kosovo sovereignty issue and 48 have remained passively or actively neutral. These “neutral” states have either remained silent, promised to review the issue in the future, or called for dialogue. None of them have taken the polar positions of supporting Kosovo or Serbia, making the dichotomous choice between sides that this study relies upon irrelevant. Of the 142 UN member-states that have taken a firm position on this issue, 111 have chosen to support Kosovo’s sovereignty and 31 have maintained that Kosovo is an integral part of Serbia. Arguments against Kosovo sovereignty have taken the form of outright supporting Serbia or declaring that their declaration of independence violates international law. Both reject the fundamental issue of Kosovo’s sovereignty, so we include them under the same category of rejecting Kosovar independence.

The following sections examine the effect of American and Russian influence on the global sample depending on the position they have taken with Kosovo. We begin by examining the larger grouping of states recognizing Kosovo, analyzing the two states’ influence according to the FBIC Index, MYRIAD 1.0, and MYRIAD 2.0. This section will primarily examine if the descriptive statistics provide evidence in support of our first hypothesis. The next section describes the influence of Russia and the United States within countries that have rejected Kosovo’s sovereignty, examining whether or not the descriptive statistics provide support for our second hypothesis. The final analytical section will discuss outliers in both categories and attempt to reconcile evidence in support of our third hypothesis. Any additional outliers that fall outside the framework of the third hypothesis will be examined in greater detail to theorize whether an explanation exists. The study finishes with a conclusion of our findings on the descriptive power of the three indices as they apply to the case of UN member-state recognition or rejection of Kosovo’s sovereignty.

Influence in States Recognizing Kosovo Sovereignty

The FBIC Index has American and Russian influence measurements in 104 of the 111 states that have declared support for Kosovo's sovereignty, accounting for 93.69% sample coverage for this grouping. There are seven states in this category that do not have FBIC measurements to compare for Russia and/or the United States. The seven omitted states are: Andorra, Barbados, Lichtenstein, the Marshall Islands, Micronesia, Monaco, and San Marino. All of these except Barbados are due to a lack of total trade data at the source that are needed to create index values. Barbados is omitted because they recognized Kosovo's sovereignty in 2018, which temporally is not yet covered by the sources of the index's component variables.

MYRIAD 1.0 has American and Russian influence measurements in 86 of the 111 states formally recognizing Kosovo's sovereignty, accounting for 77.48% of possible sample coverage. There are 25 states omitted from the MYRIAD 1.0 analysis because missing component variables make creation of influence measurements not possible at this time. Similar to FBIC, Barbados is excluded because it is too temporally current to have the necessary component variable data available. The remaining 24 omitted states are absent due to a lack of source Polity data that makes creation of the Polity affinity component not possible at this time. These states are: Andorra, Antigua & Barbuda, Belize, Brunei, Dominica, Grenada, Iceland, Kiribati, Liechtenstein, the Maldives, Malta, the Marshall Islands, Micronesia, Monaco, Nauru, Palau, Samoa, San Marino, Somalia, St. Kitts & Nevis, St. Lucia, Tonga, Tuvalu, and Vanuatu. As with the FBIC Index, many of these are micro-states, although a few larger states lacking polity data like Somalia stand out.

MYRIAD 2.0 generates American and Russian influence measurements for 110 of the possible 111 states supporting Kosovo's independence, a sample coverage rate of 99.10%. Only Barbados is excluded due to temporal unavailability of component data, as with the other two indices. The impressive inclusion rate for MYRIAD 2.0 is due to utilizing different sources and calculations for the variables used to calculate the index measurements. If we compare the three indices just on possible sample coverage, we find the advantage going to MYRIAD 2.0 (99%). Second highest coverage for the FBIC Index (94%) and third most to MYRIAD 1.0 (75%). The common outlier between the three indices is Barbados. The remaining inconsistent outlier states are due to component variable limitations for total trade in the case of FBIC and Polity affinity for MYRIAD 1.0. Many of these omissions are micro-states where data coverage is commonly missing in many databases. MYRIAD 1.0 has a number of larger excluded states that are included in the other two, such as Iceland and Somalia.

Based on our theoretical framework and hypotheses, we expect to see higher American than Russian influence in the states that chose to extend diplomatic recognition to Kosovo. We test this by examining the FBIC, MYRIAD 1, and MYRIAD 2.0 influence levels of Russia and the United States within each of these states during the year in which they announced formal support for Kosovo's sovereignty. FBIC shows higher American influence in 98 of the 104 (94.23%) pro-sovereignty states available in the index. MYRIAD 1.0 correctly reflects higher American influence for this group in 70 of 86 possible sample states (81.40%). MYRIAD 2.0 depicts higher American than Russian influence over 95 of 110 (96.36%) sample states in the index that support Kosovo sovereignty.

We can conclude in the category of states recognizing Kosovo's sovereignty that the indices generally have fair coverage and adhere well to the predicted influence levels we expect according to our first hypothesis. MYRIAD 2.0 has the best sample coverage at 99%, then FBIC at 94%, followed by MYRIAD 1.0 at 78%. The FBIC Index performs best at predicting higher American influence in states recognizing Kosovo, achieving 94% accuracy at reflecting our hypothesis. MYRIAD 2.0 shows higher American influence in 86% of these states and MYRIAD 1.0 at 81%. We can conclude that all three indices generally confirm to a substantial degree our first hypothesis. MYRIAD 2.0 has the best sample coverage, while FBIC correctly reflects higher American than Russian influence in the most states within this categorical sample.

Influence in States Rejecting Kosovo Sovereignty

The FBIC Index has American and Russian influence measurements for 31 states that have rejected Kosovo's declaration of sovereignty, comprising 100% of the possible sample in this category. MYRIAD 1.0 has influence measurements for the full 31 states in this category, obtaining 100% coverage. As with the others, MYRIAD 2.0 also has output for Russia and

the United States in all 31 states, achieving 100% coverage for the category. The comparative sample coverage for all three indices is impressive and will allow for a robust comparison of their findings. We expect that the predictive power of our “Russia vs. United States” framework will be less accurate within this group of states due to the interaction with states affected by our third hypothesis. The sample will include states rejecting Kosovo’s sovereignty not only because of loyalty to Russia, but also those that do so as a rebuke against separatist movements within their own borders. We will now examine the descriptive accuracy of the samples for each of the indices. Deeper outlier examination will take place in the next section.

As anticipated, the comparative accuracy of indices in this category are far less robust than in the previous grouping. It is notable that their rates are fairly consistent, with all three reflecting generally similar descriptive percentages. The FBIC Index finds 15 out of 31 (48.39%) states rejecting Kosovo have higher Russian influence than American. MYRIAD 1.0 finds 17 out of 31 (54.84%) fit under the same framework; MYRIAD 2.0 depicts 15 out of 31 (48.39%) with a Russian influence advantage. The three indices appear to all perform moderately under the conditional circumstances of our expectations in this category of states. The following section will expand upon how our third hypothesis accounts for the higher percentage of outliers in this category, as well as addressing any additional states that do not fit within our current theoretical framework.

Anti-Sovereignty States with Higher Russian Influence

| State | RUS FBIC | RUS MYRIAD 1.0 | RUS MYRIAD 2.0 |
|--------------|-----------------|-----------------------|-----------------------|
| Armenia | 0.404245883 | 193.2320251 | 42.33127594 |
| Azerbaijan | 0.204806387 | 63.03720474 | 30.80560875 |
| Belarus | 0.840371788 | 241.1625671 | 42.1257515 |
| Cyprus | 0.251480103 | 122.5617371 | 36.52253723 |
| Iran | 0.132396236 | 34.40041733 | 13.61689186 |
| Kazakhstan | 0.613731086 | 107.8476028 | 39.82567596 |
| Kyrgyzstan | 0.551389337 | 193.1086121 | 42.1123848 |
| Laos | 0.062637873 | 127.5695724 | 11.76323032 |
| Moldova | 0.176803902 | 114.6847076 | 36.73280716 |
| Syria | 0.131553069 | 43.12485504 | 29.54683685 |
| Tajikistan | 0.60568583 | 241.9257965 | 43.45266724 |
| Ukraine | 0.287363887 | 121.1647186 | 46.48931122 |

Outlier Analyses

There are forty combined outlier states that do not support the position of their influence leader between Russia and the United States between the FBIC, MYRIAD 1.0, and MYRIAD 2.0. These common disagreement states include: Angola, Argentina, Bolivia, Bulgaria, Cuba, Czech Republic, Greece, Hungary, Jamaica, Mexico, Nigeria, Slovenia, Spain, Uruguay, and Venezuela. We have hypothesized that a number of these states fall under the auspices of our third hypothesis regarding strong separatist movements within states leading them to reject Kosovo’s unilateral declaration of sovereignty. This is not a specific attack against Kosovo, as many of these states otherwise would likely support them, but rather because they reject all self-determination movements that could reflect upon their own domestic regionalist factions.

Angola, Argentina, Bolivia, Greece, Mexico, Nigeria, Spain, and Venezuela all have national histories marked by major separatist movements that have more or less endured into the present. As expected, they all have explicitly denounced Kosovo’s declaration of sovereignty, theoretically as a reflection of them not wanting to legitimize their own internal opponents. A few of these states have extremely high American influence or are members of intergovernmental organizations that support Kosovo, indicating that the separatist issue takes precedent for them as an existential threat greater than all other considerations in this case. Mexico has since 1994 faced an indigenous separatist movement in their

southern states called the Zapatist Army of National Liberation (EZLN). The ideologically Marxist forces of the EZLN have for over a decade held de facto control over the state of Morelos and partially in the state of Chiapas. Although the Mexican government and the EZLN has cooled hostilities since the 1990s, Mexico has since then maintained their strict anti-secessionist policy on the international stage.

This is also true for Spain, which as an EU and NATO member with high levels of American influence would be a presumed supporter of Kosovo. Spain was even involved in the 2000 international military action in Kosovo, which brought the region de facto autonomy from Serbia as a result of NATO intervention. However, Spain's decision was not guided by international alliances or Russian influence, but rather their own troubled history with regional separatism in the Basque and Catalonia regions. Basque nationalism in modern Spain resulted in political violence throughout the 1950s to the 1980s launched by the separatist Basque Country and Freedom (ETA) movement. Catalan separatism escalated in the mid-2010s, which culminated in the 2017 Catalan independence referendum. This referendum on independence in Catalonia resulted in 92% votes in favor, after which the Catalan Parliament acted on the result. A constitutional crisis in Spain ensued, which Spain reacted against by deploying state police to Catalonia and arresting Catalan Parliament leaders. Considering the history of separatist violence and political action, it is unsurprising that the general circumstances of the Kosovo issue is incompatible with their domestic policy. Along with the other previously-mentioned states, we see higher American influence than Russian, but their rejection of Kosovo appears to stem from staunch anti-separatism. We can conclude that while the FBIC Index does not explain their decision in this issue, this relatively limited sample can be theoretically explained in its historical context.

Bulgaria, the Czech Republic, Hungary, and Slovenia all possess higher levels of Russian influence compared to American, yet still have recognized Kosovo as a sovereign state. These cases do not align strictly with our theoretical expectations, but rather than contradicting our method may simply require an extension of our scope to include other Kosovo backers that go beyond just the United States. Considering all of these states are within the European Union, it would not be unusual to find that the reason Russia has higher influence than the United States in these states is not because Russia is particularly influential, but because another larger EU state possesses the majority or at least a high plurality of the influence levels. This influencer is likely an early proponent of Kosovo's sovereignty, accounting for the decision of each of these states to back that position. Examination of index output for these four states confirm our expectations that a different strongly pro-Kosovo state holds a substantial influence advantage over Russia and the United States in these cases. All three indices depict a substantial influence advantage for Germany in the Czech Republic, Hungary, and Slovenia. One particularly stark example is Hungary, where Russian FBIC influence is 0.219, United States is 0.178, and German is 0.744. For each of these states across all indices, we see far greater magnitudes of influence for a state that was an initial supporter of Kosovo and likely exercised their influence over these states to overcome higher Russian than American influence.

External Influencers and Pro-Sovereignty States

| Outlier State | FBIC Lead | MYRIAD 1.0 Lead | MYRIAD 2.0 Lead |
|----------------------|------------------|------------------------|------------------------|
| Bulgaria | Austria | Austria | Germany |
| Czech Republic | Germany | Germany | Germany |
| Hungary | Germany | Germany | Germany |
| Slovenia | Germany | Germany | Germany |

Cuba has higher American than Russian influence, yet has refused to recognize Kosovo and upholds Serbia's territorial integrity. Although this is an outlier, it is not one that is beyond explanation with a deeper examination of the historical context and a comparative analysis of the influence trends within Cuba. The relationship between Cuba, Russia, and the United States is common knowledge. After the Cuban Revolution in 1959 brought the communists into power, they aligned with the Soviet Union and established strong military ties that culminated in the stationing of Soviet nuclear weapons on the island. The United States in response initiated a military blockade to cut off the island from Soviet reinforcements and an economic embargo that continues partially into the present year. Cuban-Soviet relations remained strong until the USSR finally dissolved in 1991, after which Cuba was cut off from its most substantial economic and

military partner. Relations with the new Russian government declined and Cuba's geographical distance from Russia has since kept connections low. American-Cuban relations made inroads during the Obama Administration, but remain tense. While Cuba's decision not to recognize Kosovo does not adhere to our hypotheses, it is not an unusual statistical outlier when considering the historical conditions of their relations with the United States and Russia.

Jamaica and Uruguay fall under another category of outliers that falls into the margin, unable to be explained through systemic conditions. American influence over Jamaica was extremely high in 2009 across the indices, yet that state explicitly came out against Kosovo's sovereignty. Jamaica has no separatist movements and is closely connected in the security and economic realms to the United States. Despite American pressure, the Minister of Foreign Affairs indicated in 2009 that they would not be extending formal recognition to Kosovo and the following year indicated that they supported Serbia's territorial integrity. Internal memos leaked to the press give the only rationale for Jamaica's decision as a blanket opposition to recognizing any separatist movements, although their position does not appear to be based in any fears of internal unrest. Uruguay likewise has taken a stand against Kosovo, although for no discernable reason. Lacking any leaked documentation, a motive cannot be established at this time, although it could be as inexplicably arbitrary as Jamaica's. We conclude that Jamaica and Uruguay's positions on Kosovo do not adhere to our hypotheses, but are extremely out of the norm and do not represent any large systematic or empirical trends.

The remaining 25 outlier states are correctly places by at least one of the three indices. Performing a comparative analysis of these disputed outliers provides some interesting information on which indices perform correctly compared to the others. The FBIC Index assigns 16 of 23 (69.57%) outlier states with their theoretically presumed lead influencer when at least one other index does not. MYRIAD 1.0 assigns 7 of 22 (31.82%) outlier states with their assumed lead when another index does not, while MYRIAD 2.0 does so with 10 of 25 (40.00%). We find evidence here that amongst the disputed outlier states, FBIC best reflects the expected relationships, followed by MYRIAD 2.0 and then MYRIAD 1.0.

Outlier State Lead Influencer by Index and Position on Kosovo

| State | FBIC | MYRIAD 1.0 | MYRIAD 2.0 | Kosovo Stance |
|----------------|------|------------|------------|---------------|
| Albania | USA | RUS | RUS | For |
| Algeria | USA | RUS | USA | Against |
| Andorra | N/A | N/A | RUS | For |
| Angola | USA | USA | USA | Against |
| Argentina | USA | USA | USA | Against |
| Bolivia | USA | USA | USA | Against |
| Bulgaria | RUS | RUS | RUS | For |
| Burkina Faso | RUS | RUS | USA | For |
| China | RUS | RUS | USA | Against |
| Croatia | USA | USA | RUS | For |
| Cuba | USA | USA | USA | Against |
| Czech Republic | RUS | RUS | RUS | For |
| Estonia | USA | RUS | RUS | For |
| Finland | USA | RUS | RUS | For |
| Georgia | USA | USA | RUS | Against |
| Ghana | USA | RUS | USA | For |
| Greece | USA | USA | USA | Against |
| Hungary | RUS | RUS | RUS | For |
| India | USA | RUS | USA | Against |
| Jamaica | USA | USA | USA | Against |
| Latvia | USA | RUS | RUS | For |
| Lithuania | USA | RUS | RUS | For |
| Macedonia | USA | RUS | RUS | For |
| Mexico | USA | USA | USA | Against |
| Montenegro | USA | RUS | RUS | For |
| Nigeria | USA | USA | USA | Against |
| North Korea | RUS | USA | RUS | Against |
| Poland | USA | USA | RUS | For |
| Romania | USA | RUS | RUS | Against |
| San Marino | N/A | N/A | RUS | For |
| Senegal | USA | RUS | USA | For |
| Slovenia | RUS | RUS | RUS | For |
| Spain | USA | USA | USA | Against |
| Sri Lanka | USA | RUS | USA | Against |
| Sweden | USA | RUS | USA | For |
| Tuvalu | RUS | N/A | USA | For |
| Uruguay | USA | USA | USA | Against |
| Venezuela | USA | USA | USA | Against |
| Vietnam | RUS | USA | USA | Against |
| Yemen | USA | RUS | USA | For |

Conclusions

This study has examined the concept validity of the FBIC, MYRIAD 1.0, and MYRIAD 2.0 indices as they apply to predicting whether states formally recognized or rejected Kosovo's sovereignty following its 2008 unilateral declaration of independence from Serbia. While this issue specifically came down to a dispute between Kosovo and Serbia, we developed a theoretical framework for understanding it as an influence-centered issue between two larger and more influential supporters of those two states: the United States (proxy for Kosovo) and Russia (proxy for Serbia). We hypothesized states that recognized Kosovo would do so out of an effect of larger American influence over them than Russian, making them more likely to take the side of the United States. States with larger Russian influence would take their side by rejecting the sovereignty of Kosovo outright. There were also a number of states rejecting Kosovo's sovereignty that we hypothesized would have higher American influence, but still side with Russia. These states took this position not out of Russian influence, but because they have their own domestic-level separatist movements. They reject Kosovo because their self-determination could reflect upon their own regionalist issues.

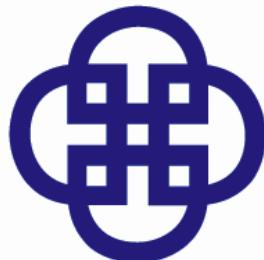
We tested our three hypotheses by comparing the influence levels of Russia and the United States within UN member-states that took a definitive position on Kosovo within the year in which they did so. Influence was analyzed through the use of three different indices capturing this concept: FBIC, MYRIAD 1.0, and MYRIAD 2.0. Generally, we found evidence that all three indices observed higher American influence levels than Russian in most states that recognized the sovereignty of Kosovo. MYRIAD 2.0 had the highest sample coverage at 99%, while the FBIC Index had the highest predictive accuracy at 94%. Around half of the states rejecting Kosovo in all three indices had higher Russian influence than American, with only a slight predicative advantage going to MYRIAD 1.0. Amongst the outliers that did not adhere to our first two hypotheses, we found that as expected the majority of them had higher American influence, but their domestic separatist histories pushed them to reject Kosovo's sovereignty. There were also a number of outliers where an outside influencer led them to recognize Kosovo, primarily Germany. We can conclude that although MYRIAD 2.0 has the best data coverage for this case study, the FBIC Index performed best in accordance with our theoretically-motivated hypotheses.

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DIPLOMETRICS

**QUALITATIVE VALIDATION STUDY OF
INFLUENCE INDICES:**

**COMMUNIST BLOC ALIGNMENTS DURING
THE SINO-SOVIET SPLIT
MARCH 2019**

AUSTIN MATTHEWS

Chapter 3

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Executive Summary

1. This study compares and contrasts three indices measuring interstate influence within the case of communist regime alignment during the Sino-Soviet Split. This conflict involved the ideological battle between the reformist Soviet leadership and the hardline Chinese, wherein they struggled for leadership of the communist bloc. While the Soviet Union began at an advantage as the previously recognized undisputed leader of the bloc, the Chinese made inroads with several states and even turned a few against Moscow.
2. The three indices utilized in this study are the Foreign Bilateral Influence Capacity (FBIC) Index, Merged Yearly Rational Interaction Affinity & Dependence (MYRIAD) 1.0, and MYRIAD 2.0. There is generally inclusive coverage for FBIC and MYRIAD 2.0 in all sample states for China and the Soviet Union. MYRIAD 1.0 is used as a supplement in this study because the lack of treaty index source data creates missing measurements for the Soviet Union's influence across the sample.
3. We develop this study through a series of state-specific analyses that test the performance of the indices at reflecting the historical context of that state's relations with China and the Soviet Union relative to the conflict. Each section of analysis begins with a historical overview to guide our expectations of the indices' performance. We then perform descriptive analysis on comparative influence advantages, growth rates over time, magnitude levels, and timing of shifts.
4. The evidence from the collection of cases indicates that the FBIC Index performs best at accurately depicting the historical situation of each state's involvement in the Sino-Soviet Split, generally supporting our hypotheses about the conditions of their participation. MYRIAD 1.0 levels for China appear to concur with the magnitude and directionality seen in the FBIC Index's output. MYRIAD 2.0 is more erratic in its measurements of influence, generally performing moderately well in directionality, but falling short in comparative advantage gaps and magnitude levels.

Descriptive Accuracy of Indices in the Case Study

| Target Country | FBIC | MYRIAD 2.0 |
|-------------------|----------|------------|
| Afghanistan | Strong | Moderate |
| Albania | Strong | Weak |
| Angola | Strong | Moderate |
| Benin | Moderate | Weak |
| Bulgaria | Strong | Moderate |
| Cambodia | Strong | Strong |
| Congo-Brazzaville | Moderate | Moderate |
| Cuba | Strong | Weak |
| Czechoslovakia | Strong | Moderate |
| East Germany | Strong | Moderate |
| Ethiopia | Strong | Strong |
| Hungary | Strong | Moderate |
| Laos | Strong | Weak |
| Mongolia | N/A | Weak |
| Mozambique | Strong | Moderate |
| Poland | Strong | Moderate |
| Romania | Strong | Moderate |
| Somalia | Strong | Moderate |
| South Yemen | Strong | Moderate |
| Vietnam | Moderate | Moderate |

Introduction

The death of Joseph Stalin in 1953 sent shockwaves across not only the Soviet Union (USSR), but also the globe. Stalin had been the undisputed head of the communist international movement since consolidating power in the 1930s and allied parties worldwide had looked to him as the undisputed patriarch of their geo-political struggle. Following a brief leadership struggle, Nikita Khrushchev emerged as the new General Secretary of the Soviet party and initiated a reform platform that was a stark contrast to Stalin's totalitarian legacy. Although the communist bloc initially appeared solid, cracks began to form between Khrushchev and some of the more recalcitrant Stalinists like Mao Tse-tung of China and Enver Hoxha of Albania. Cracks turned into full rifts when Khrushchev in 1956 delivered his "Secret Speech" at the 20th Congress of the Communist Party of the Soviet Union (CPSU), in which he denounced Stalin and his regime as repressive and ideologically antithetical to Marxism-Leninism. This was shocking because it was a direct repudiation of the Stalinist system by Stalin's successor.

Enver Hoxha of Albania refused to participate in Khrushchev's process of "de-Stalinizing" the Eastern Bloc, driven by a mix of ideological commitment and his desire for political survival. The period of 1956-1960 witnessed massive overturn in the leadership of parties within the Soviet sphere who had been ardent Stalinists, so Hoxha was perhaps rightfully concerned that Khrushchev might push for a change within the Party of Labour of Albania (PPSH). His concerns were further compounded by the rapprochement between the USSR and Hoxha's neighboring adversary, Josip Tito of Yugoslavia, who had been the scapegoat for an earlier violent purge of the PPSH in 1948. Hoxha and his Albanian loyalists condemned Khrushchev for "revisionism" in public forums, agitating against the Soviet party's first-among-equals status. As a result of continued animosity, the Party of Labour of Albania decided that their future was perhaps better aligned with another emergent challenger to the leadership of the CPSU, one more accepting to the hard Stalinist authoritarianism Hoxha wished to continue pursuing.

Mao Tse-tung of the People's Republic of China was also taken aback by Khrushchev's denunciation of Stalin in 1956. Although relations between the CPSU and Communist Party of China (CPC) had been fraternal, there had been strains created by issues with border demarcation, holdover Soviet bases on Chinese territory, and mutual distrust during the Korean War. Despite these, the CPSU and CPC parties remained close allies, with Soviet technical advisors aiding China in its industrial drive and Red Army advisors helping to modernize their military in the aftermath of the devastating Chinese Civil War. The death of Stalin in 1953 would start the two comrade parties down a new path, however. Mao had been an enthusiastic adherent of the principals of Stalinist totalitarianism, even if he would not describe himself as a Stalinist, making the relationship with "revisionist" Nikita Khrushchev immediately precarious.

Following the Secret Speech in 1956, relations soured and the ideological divergences became more of a focal issue, coinciding with China's ascent as a global power. De-Stalinization in Eastern Europe and the new concept of "peaceful coexistence" with the Western powers alarmed Mao, who thought it would allow the US and Taiwan to further militarize against mainland China. Finally, in 1958 Mao spoke out against Khrushchev and began to utilize the shifting loyalties of Albania as a proxy by which to aggressively criticize the CPSU leadership's dedication to Marxism-Leninism.

Proxy quarrels turned into open hostility in 1960 following the downing of an American U-2 surveillance aircraft in the Soviet Union. Mao called for an aggressive confrontation of the United States, while Khrushchev pursued a less hostile demand of an official apology from the American government. Receiving none, Mao pushed harder and at a meeting of communist parties in Romania accused the Soviet leadership of opening up other regimes to American aggression if left unchallenged. Khrushchev in turn attacked Mao's continued authoritarian tendencies and cult of personality, attacks echoing the earlier denouncement of Stalin. The verbal sparring centered on which party was actually adhering to the correct path to communism and who was rejecting the ideological line of the international movement.

Chinese and Soviet officials over the next year exchanged barbs; technicians were withdrawn from China and in 1961 the Soviet Union broke off relations with Albania as a warning to the CPC. The following year, China severed relations with the Soviet Union in response to Khrushchev's actions during the Cuban Missile Crisis, which Mao saw as further capitulation to the United States. The Sino-Soviet split had begun in earnest and both sides began to aggressively jockey for leadership in the global communist movement. The USSR worked to keep their allies from turning away as Albania had done, while

China looked to pursue the realignment of communist parties who feared de-Stalinization would create domestic instability, as had happened in 1956 Hungary.

Methods of Analysis and Hypotheses

The state sample in this analysis includes those led by a de jure communist regime that partially or entirely existed during the period acknowledged as open adversarial relations between the USSR and China, known as the Sino-Soviet split, from 1960-1989. These regimes include: Afghanistan, Albania, Angola, Benin, Bulgaria, Cambodia, Congo-Brazzaville, Cuba, Czechoslovakia, East Germany, Ethiopia, Hungary, Laos, Mongolia, Mozambique, North Korea, Poland, Romania, Somalia, South Yemen, Vietnam, and Yugoslavia. The primary states whose influence will be examined are those that are accepted as the main “belligerents” in this ideological and geo-political conflict: the People’s Republic of China and the Soviet Union. Due to them not taking a side and the FBIC Index being more effective at predicting declared allegiance and not determined neutrality, I exclude from the analysis any communist states that maintained explicit, declared neutrality throughout the entirety of the Sino-Soviet Split. These neutral states are North Korea and Yugoslavia.

We develop a series of hypotheses to guide our analysis of how the FBIC Index’s output performs in analyzing the position of states toward Moscow and Beijing during the period of the conflict. Prior to 1960, even China acknowledged that the Soviet Union was the leader of the communist world bloc, so it can be assumed that all other states (with the exception of Yugoslavia after 1948) followed this policy. Communist states should thus be expected to default to supporting Moscow in the conflict if they held power before the conflict began. Once the split breaks out, influence levels will determine the position that extant and emerging communist states take in their alignment. States with substantially high Soviet influence will fall on the side of Moscow and become vocal advocates for their ideological supremacy over Beijing. States that emerge and have marginal influence from both sides will default to the Soviet camp, but will not be vocal advocates out of concern for alienating what little (but vital) support they receive from China or out of indifference because of more significant issues they face domestically (civil war, interstate war). States who have substantially higher Chinese influence initially or who have Chinese influence overtake Soviet levels in a major way will become vocal supporters of Beijing and officially side with China in the split. In order to appraise these ideas, we outline them in the testable hypotheses below:

Hypothesis 1: States will continue to support the Soviet Union over China if the Soviets maintained an influence advantage over China throughout the period.

Hypothesis 2: States will not break with the Soviet Union but also not condemn China if influence of both states remains marginal.

Hypothesis 3: States will reject the Soviet Union and support China as the ideological leader of the international communist bloc if Chinese influence overtakes that of the Soviet’s consistently.

The following section will examine the performance of the FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 influence indices within the context of the Sino-Soviet Split through a series of state-specific studies. Each state included in the study was actively involved in the conflict as a member of the communist bloc during the sample temporal period, indicating that they were the main constituency for choosing either Soviet liberalization or Chinese conservatism in this ideological dispute. Each of our state-specific subsections will be organized in the following manner. We begin by developing a brief cast study that describes the history of that state’s communist regime and their relationship with the Soviet Union, China, or both. This is followed by a short description of how they were involved in the Sino-Soviet Split, particularly any stance they took or their rationale for remaining uninvolved. Second, we present descriptive and comparative analyses of the three influence indices for each state, examining the variations in Chinese and Soviet influence over time. These trends and shifts are analyzed in the historical context and are applied to our theoretical expectations. Each study is concluded with a discussion of the strengths and weaknesses of the indices and a synopsis of how accurately they depict the state’s position on the Sino-Soviet Split.

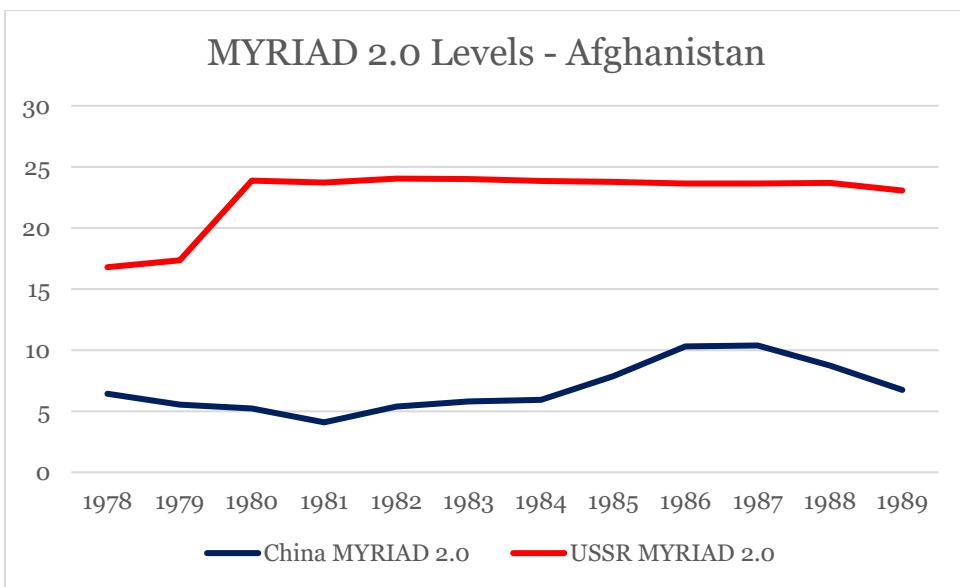
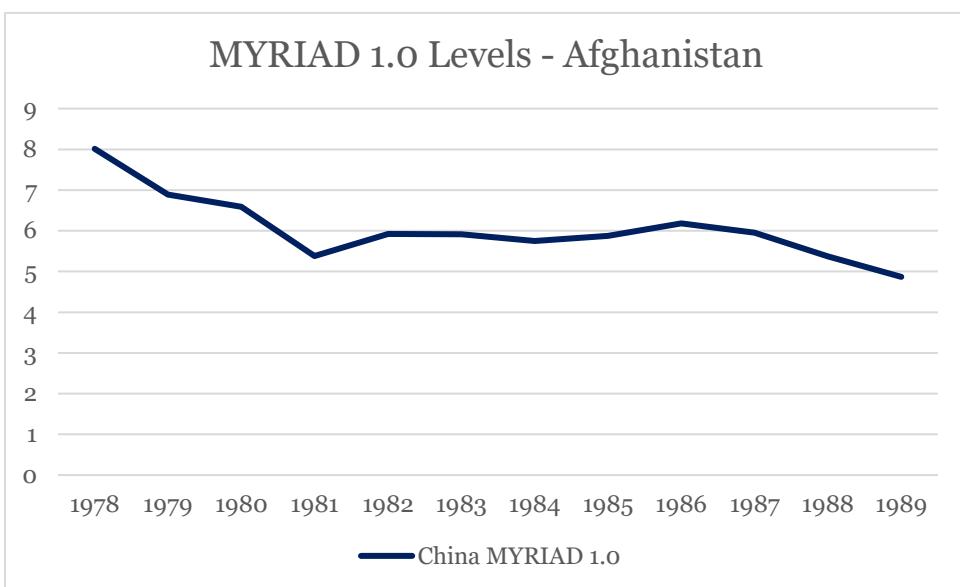
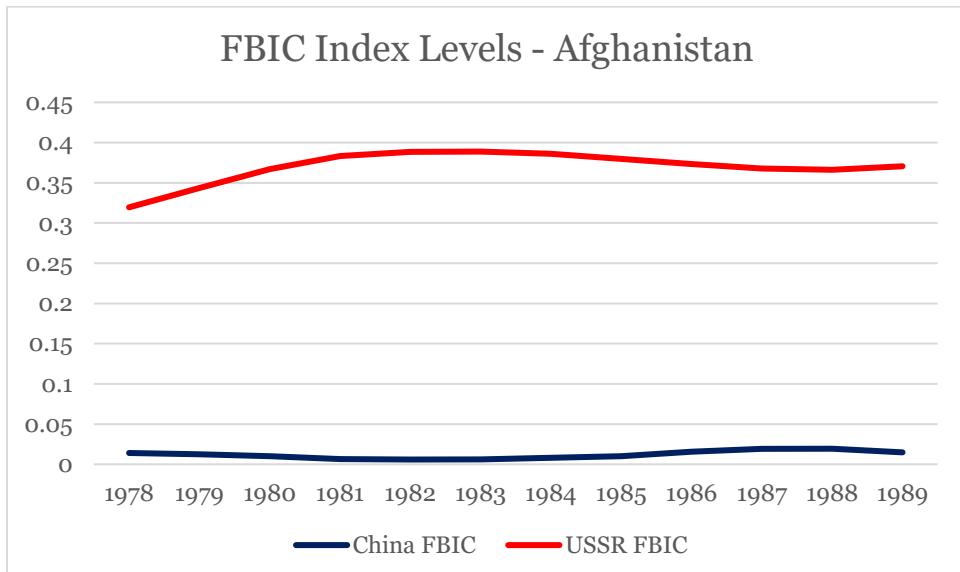
Descriptive Analyses

Afghanistan

Following the Saur Revolution in 1978, the communist People's Democratic Party of Afghanistan (PDPA) seized power, supported in part by Soviet aid. The early years of the PDPA's rule were unstable and it seemed that the warring factions within the party would cause their nascent regime to collapse. The Soviet Union had been a major force over pre-Saur Afghanistan and increased their economic and military assistance to the PDPA in order to prop up their new communist ally. This influence was unable to quell the factional strife and a year after seizing power there was an intra-party coup. The leader was assassinated and replaced by Minister of Defense Hafizullah Amin, but this move displeased the Soviet leadership. In December 1979, Soviet special forces aided the Parcham faction of the PDPA in launching another intra-party coup and assassinated Amin. Looking to maintain their new puppet regime, the Soviet Union launched a full military occupation of Afghanistan to protect the new Babrak Karmal regime and defeat the anti-communist insurgency in the country. From 1979-85, the USSR would station upward of 115,000 troops in Afghanistan and engaged in major military operations, which faced severe resistance from the Mujahideen rebel coalition. Afghanistan remained politically, economically, and militarily reliant on the Soviet Union throughout the period, even after the Soviets eventually withdrew their forces in 1985. The historical circumstances outlined here indicate that the indices should show substantial Soviet influence over Afghanistan, which coincides with the PDPA's recognition of the USSR as the leading communist international power.

There is maximum FBIC Index and MYRIAD 2.0 coverage for China and the Soviet Union in Afghanistan, but unfortunately MYRIAD 1.0 does not have USSR data available due to missing sub-components. Across the FBIC and MYRIAD 2.0, there appears to be a general consensus that the USSR for the entire temporal period maintains a substantially higher level of influence than China, as would be expected considering the state was occupied by the Soviet Red Army for much of this period. Chinese influence in the FBIC remains marginal throughout the entire period, only increasing slightly during the wind-down of the Soviet occupation in the mid-1980s. MYRIAD 1.0 has Chinese data available to analyze, which appears to tell generally the same story as the other indices. Notable is the dramatic decline in Chinese influence in Afghanistan immediately after the invasion period, although this decline may only look so sharp due to the scale. Considering the relatively high values MYRIAD 1.0 can take, this is actually a fairly small drop in an already small influence amount. The MYRIAD 2.0 levels for China are somewhat unusual regarding the disparity between their influence and the Soviet Union's during this period. While initially not substantially far apart, Chinese influence does decrease after the invasion, but begins another positive slope from 1981-87. Although not as close as in 1978, the 1986-87 period shows a somewhat more narrow influence gap than is depicted in the FBIC Index. If MYRIAD 1.0 data for the Soviet Union was available, it is likely that it would mirror the FBIC disparity more than that of the MYRIAD 2.0, which seems far too close based on the historical context. As expected, the FBIC and MYRIAD 2.0 do show higher Soviet influence. Their level increases after the invasion and then lowers slightly during the withdrawal period. The more substantive influence gap in the FBIC Index is likely more close to reality than the MYRIAD 2.0 levels.

The FBIC Index and MYRIAD 2.0 appear to confirm our hypothesis that substantially higher Soviet influence than Chinese would lead that state's communist regime to actively side with the USSR in the period of the Sino-Soviet Split. It is likely that if available, MYRIAD 1.0 would also show a much higher Soviet level of influence, considering that Chinese levels applied to the min/max scale of that index are fairly low. All three indices seem to agree that Chinese influence throughout the period was low, declining immediately after the Soviet invasion and remaining minimal until the eventual withdrawal left an opening to slightly increase their hold through trade. The separation between the influence levels between the FBIC and MYRIAD 2.0 is probably the most notable comparison, highlighting the scale of the two indices. There is also the more smooth shifts over time in the FBIC compared with the sharp and sudden changes in MYRIAD 1.0 and MYRIAD 2.0. We can conclude that all three measurements (likely so, in the case of MYRIAD 1.0) appear to accurately reflect the actual Soviet influence control over Afghanistan that made their regime support the USSR over China in the Sino-Soviet Split, confirming our theoretical expectations.



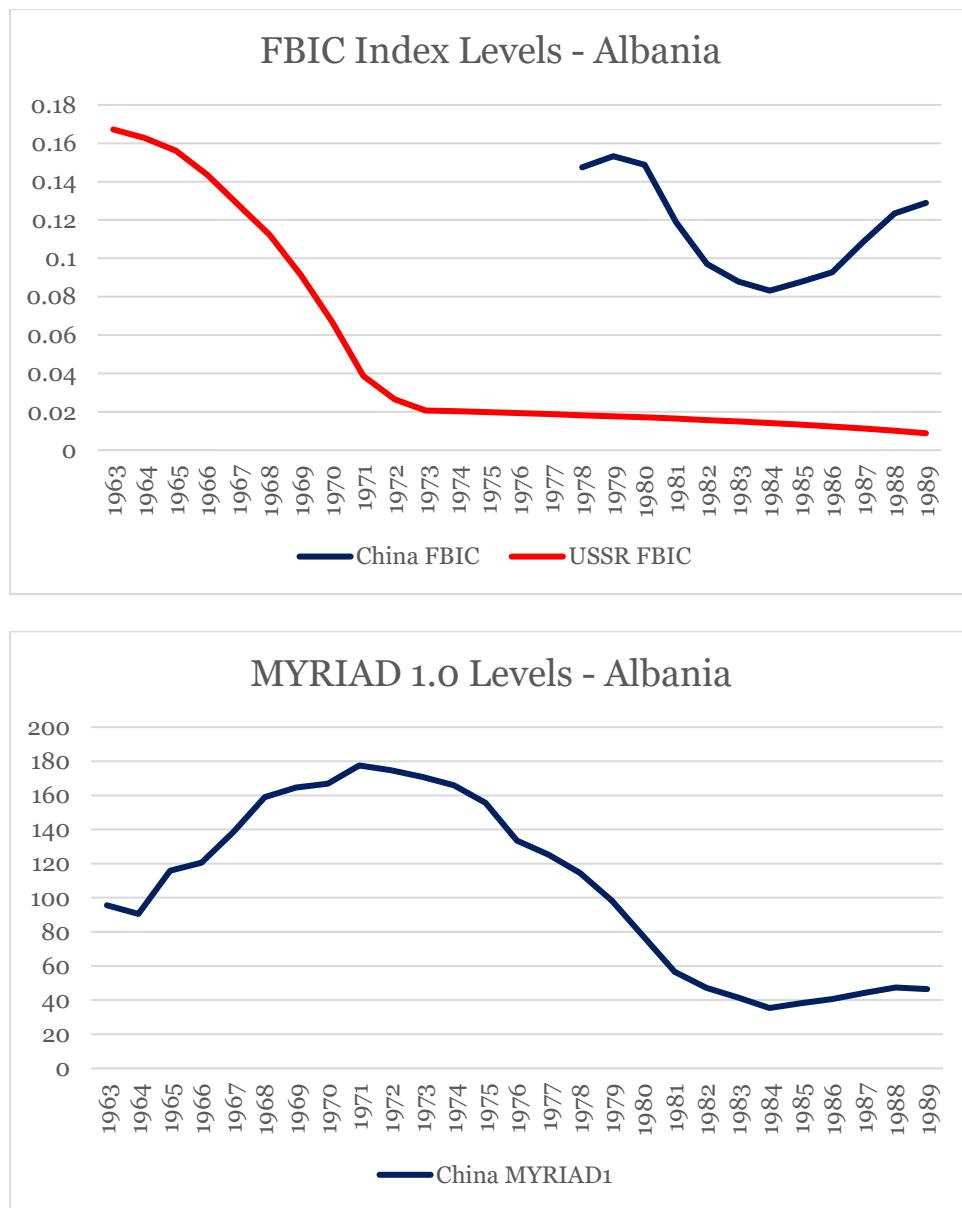
Albania

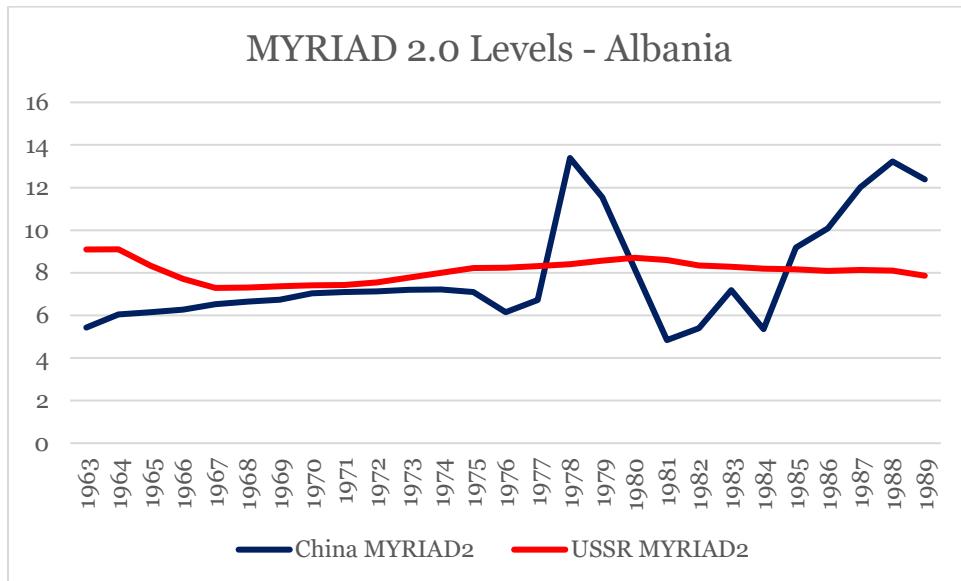
The Party of Labour of Albania (PPSH), led by communist Enver Hoxha, seized power in Albania following a successful partisan campaign against the Italian occupiers during World War II that was modeled and aided substantially by the Yugoslav communists. Hoxha established an unabashedly Stalinist regime that was notable for its isolation and repression. After the Soviet Union expelled Yugoslavia from the communist bloc in 1948, Albania became even more ardently pro-Soviet in its rhetoric. However, following the death of Soviet dictator Joseph Stalin and the rise of the more reformist Nikita Khrushchev, Hoxha began to rebel against the Soviet leadership, who he accused of revisionism. After a spat of heated rhetoric, the PPSH broke relations with the Soviet Union in 1960 and advocated support for Mao Tse-tung's China as the true adherents of Marxism-Leninism. Albania had been a proxy for Khrushchev's veiled ideological attacks for years, which led Hoxha to sever ties with the USSR and declare their support for China as the leader of the international communist movement. This was the first defection in the Sino-Soviet Split and would give China hope that perhaps they could overtake the USSR in the communist world. However, after Mao died in 1976 and moderates seized power over the Chinese party, Hoxha repeated his earlier rebellion and accused China of revisionism. Following two years of needling, China finally cut Hoxha off and broke relations, leading to the Sino-Albanian split. The Soviets refused rapprochement with the PPSH and for the remainder of the Cold War, Albania remained isolated even within the communist bloc. The historical circumstances outlined here indicate that we should see substantial Chinese influence levels within Albania that concords with them siding with China in the Sino-Soviet Split. After 1978, when Albania denounced China, we should see a sharp decrease in this influence. Soviet influence levels for the entire sample period should remain marginal, considering none of the years include the pro-Soviet period of their party history (1944-60).

There is only maximum temporal coverage for Chinese and Soviet influence in Albania in the MYRIAD 2.0 index during the period of the Sino-Soviet Split. The FBIC Index has full Soviet coverage, but Chinese measurements do not begin until 1977 due to a lack of underlying trade data. As will continue to be the case, MYRIAD 1.0 does not have Soviet influence measurements for any years during the period, but does have full coverage for China. Considering the patch-work coverage across the indices for this case, comparative analysis will require certain assumptions drawn from sub-index variables and theoretical expectations. The FBIC Index shows a fairly substantial USSR influence in 1963 that rapidly declines following the Albanian split and them siding openly with China. The high initial level is accurate, considering the Soviet Union's high level of economic and military support for Albania as a regional balance against Tito's Yugoslavia following their famous split in 1948 as a result of Tito's independence from Stalin. After 1972 there is a gradual decline until 1989 deeper into the marginal levels of influence. Contrast this with the MYRIAD 2.0 levels for the USSR in Albania, which makes little sense in the historical context. Despite the very public split and severing of relations, the Soviet Union appears in that index to maintain a roughly steady level of influence throughout the period, higher in most years even than China, which makes little sense.

Chinese coverage in the FBIC Index picks up in 1977, as relations with Albania were beginning to deteriorate following the Sino-Albanian Split. We see that Chinese influence goes into freefall from 1980-85 as they began to cut off their previously substantial support for Hoxha's regime, no longer interested in backing a regime that was ideologically critical of their party line. This decline reverses in 1986, following the death of Hoxha, when perhaps the Chinese were willing to reengage with Albania if the new leadership under Mehmet Shehu was willing to end the anti-China rhetoric coming from their party. MYRIAD 1.0 levels present a more complete picture of Sino-Albanian relations throughout the period, with their ups and downs. Following Albania's realignment toward China in the early period, there is a substantial rise in Chinese influence that comes from rapid increases in trade and arms transfers to the country, looking to bulwark Hoxha's regime against Soviet aggression. These substantial influence levels continued into the early 1970s, but start to enter decline after 1972. This matches with the beginning of the Sino-Albanian Split period and by the full separation in 1978 the Chinese influence levels have dropped to below their 1963 amount. There is a slight increase in the post-Hoxha period, but not as large as is depicted in the FBIC Index. Once again, the MYRIAD 2.0 output for Chinese influence on Albania does not seem to have much historical credibility. Throughout Albania's pro-China period, Chinese influence is still below that of the USSR until a rapid spike in 1978, the year they actually severed relations. The odd timing of these increases and the comparative levels raise questions as to the validity of the data underlying this measurement in the case of Albania.

The FBIC and MYRIAD 1.0, for the temporal ranges available, appear to accurately reflect the historical context of Albania's participation in the Sino-Soviet Split. Through an examination of the two and extrapolating missing levels, it is likely that if available, the data for both would confirm our hypothesis about Albanian allegiance to China. Negating the MYRIAD 2.0 levels, which do not conform to any historical context, there seems to be some general agreement regarding trends and comparative level differences between China and the USSR throughout the period. The suddenness of a likely Soviet drop in the MYRIAD 1.0 index would likely mirror that in the FBIC Index, although the rise of China's influence may appear less gradual than the curve implies in the later years. While it is difficult to analyze the strengths and weaknesses of the three indices due to a lack of full coverage, what we can understand from the extant data is that FBIC and MYRIAD 1.0 likely reflect the actual situation of Chinese and Soviet influence in Albania fairly closely.





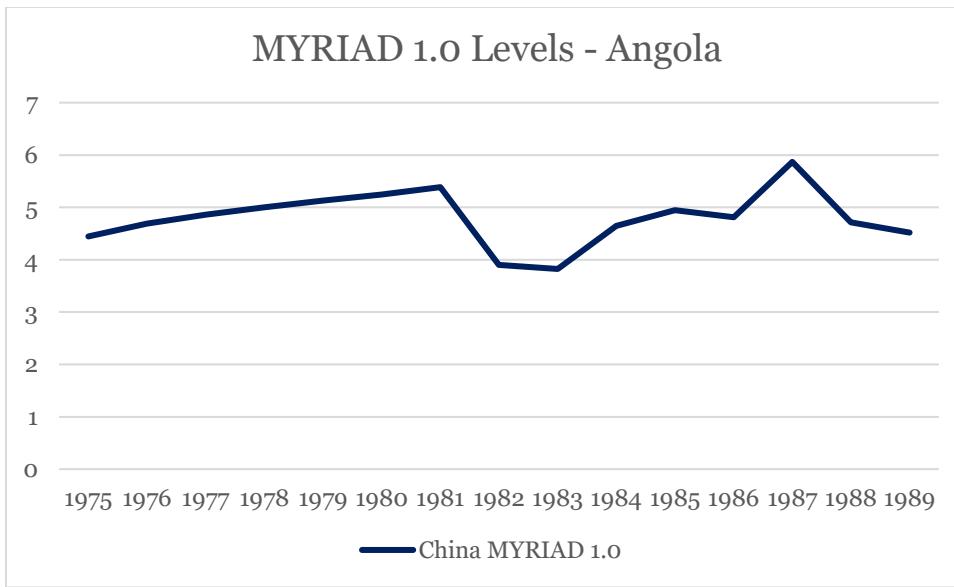
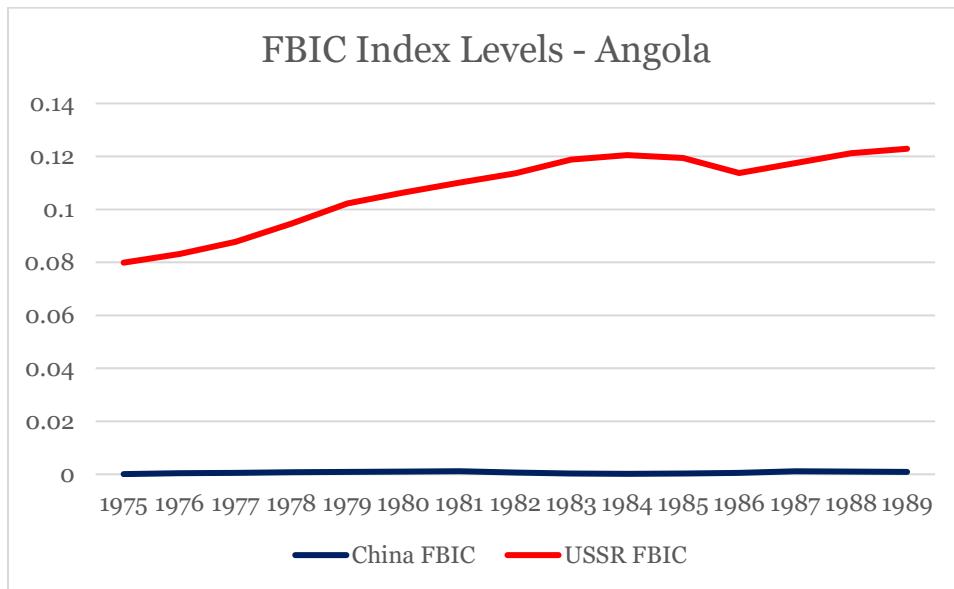
Angola

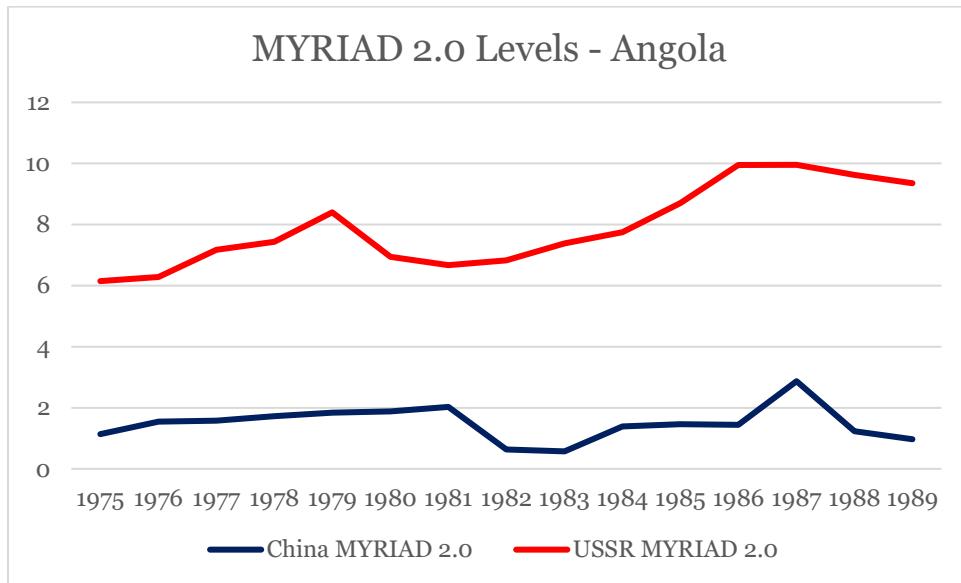
Angola achieved independence from Portugal in 1975 and the regime was immediately seized by the Marxist-Leninist liberation group that had fought the colonial occupation: the People's Movement for the Liberation of Angola (MPLA). Throughout their resistance to the Portuguese, the MPLA had been supported by the Soviet Union and Cuba, who emerged as the post-independence government's most enthusiastic backers. However, immediately after independence, Angola was plunged into a civil war that pitted the communist-backed MPLA against the National Union for the Total Independence of Angola (UNITA), which was supported militarily by the Apartheid government of South Africa. The USSR rendered financial aid and technical support to the MPLA government, while Cuba went even further by sending actual military forces to Angola at the regime's request. The civil war continued throughout the Cold War, despite the eventual withdrawal of Cuban and Soviet support. This period in Angola was more defined by the civil war than any international advocacy on behalf of their Soviet patrons. However, the MPLA remained loyal, perhaps out of necessity, to the USSR as the leading communist power. China had rendered some support to the anti-colonial front during the pre-independence period, but they did not remain involved in Angola to any major degree after 1975. The historical circumstances indicate that there will likely be a sizable Soviet advantage lead over China in Angola during the period, supporting the fact that the MPLA remained loyal to the USSR.

There is maximum influence coverage for China and the Soviet Union in Angola within the FBIC and MYRIAD 2.0 indices during the period of the Sino-Soviet Split. MYRIAD 1.0 has total coverage for China in Angola during the period. We observe a substantial difference in influence levels between the two states in Angola for the entire year range in the FBIC and MYRIAD 1.0, supporting our expectations based on the historical conditions. Both show positive directionality for Soviet influence and a relatively low plateau for China. The Chinese influence in MYRIAD 1.0 appears to agree with this marginal amount and the somewhat flat movement over time. It is notable that the FBIC Index appears more flat than either MYRIAD 1.0 or MYRIAD 2.0, although these spikes are marginal and there is no substantial historical context to explain those movements. The rising Soviet influence over time does reflect the situation on the ground in Angola, as there was a rise in military and economic aid from the USSR as their civil and border war dragged on throughout the 1980s. The major disagreement between FBIC and MYRIAD 2.0 is the directionality of Soviet influence in the period of 1986-89. FBIC displays a general increase starting in 1987 after a brief decline at the start of the Gorbachev era, while MYRIAD 2.0 shows a decline until the end of the conflict period. Considering the late 1980s was a period of Soviet withdrawal from international conflicts as a result of Gorbachev's rapprochement with the west, it is unlikely that they would invest more into the Angolan Civil War that would generate an increase in influence, making the MYRIAD 2.0's depiction of Soviet levels in 1986-89 likely more accurate.

The FBIC Index, MYRIAD 2.0, and to a degree MYRIAD 1.0 appear to largely agree on the levels and directionality of Soviet and Chinese influence in Angola during the Sino-Soviet Split. Our hypothesis about general low levels with a Soviet

advantage coheres with the observations, as Angola remained de-facto in the USSR's camp throughout the period. There is agreement about marginal Chinese influence throughout the period. Although the levels for MYRIAD 1.0 and MYRIAD 2.0 may appear substantially higher than FBIC, put into scale they are comparatively minimal. The directionality and level of Soviet influence appears to be compatible between FBIC and MYRIAD 2.0, although as noted the decline in the late 1980s depicted in the latter is likely more accurate. If data were available, it is likely that Soviet levels would be higher in MYRIAD 1.0, considering the low amounts for China on the scale throughout the period. We can conclude that all three measurements as available seem to confirm the expected levels of influence and general trends for China and the Soviet Union in Angola during the Sino-Soviet Split, supporting our theoretical expectation of their unspoken alignment with the USSR.





Benin

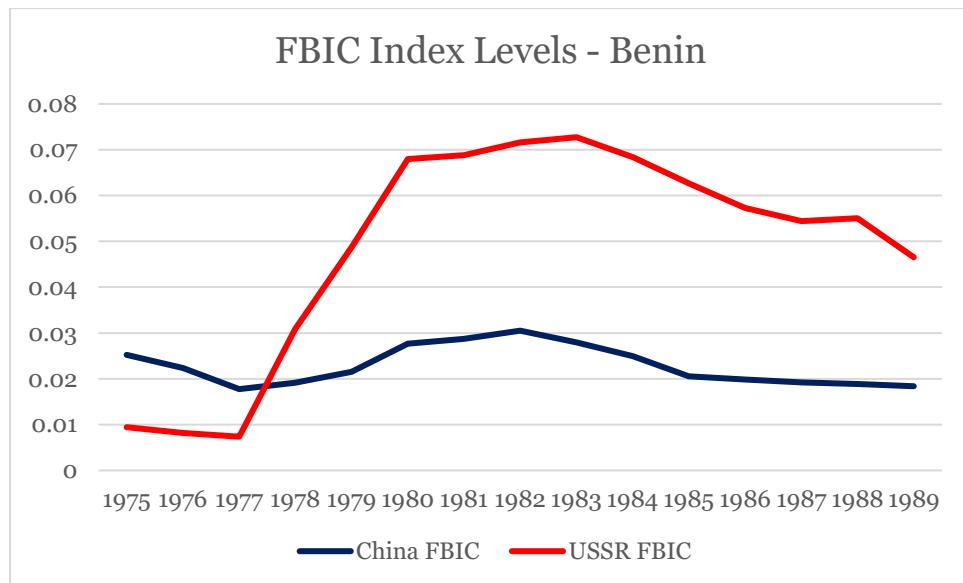
Originally the Republic of Dahomey, the state now known as Benin achieved independence from France in 1960. The country was racked with high unemployment, large foreign debt, and internal disputes that hampered the new government's development throughout the 1960s. There were three different successful coups d'état within the first twelve years of Dahomey's existence, culminating in the 1972 coup by Matheiu Kerekou. After seizing power, Kerekou dissolved the civilian government and formed a military junta council to rule the state. Two years later he would declare his government's dedication to the principles of Marxism-Leninism and launched overtures to the Soviet Union. These efforts were accepted by Moscow, who began to deliver military aid in order to bolster Kerekou under conditions where another coup was highly likely. Dahomey was renamed the People's Republic of Benin in 1975 and the People's Revolutionary Party of Benin was formed to act as the backbone of the new communist government. As expected, two years later in 1977 there was an attempted coup against Kerekou led by infamous mercenary Bob Denard and backed by the French government. The attempt failed and Kerekou remained in control of Benin until the eventual transition to democracy after the end of the Cold War. Although the Soviets had rendered valuable aid to Benin in its early years, Kerekou never declared his position in the Sino-Soviet Split, maintaining friendly relations with both China and the USSR. These relations were limited and it was understood that Benin was still in the Moscow camp by default. The historical circumstances outlined here lead us to expect that Chinese and Soviet influence levels will be small enough that Benin maintains effective passivity in the conflict, although this passivity will likely lead to observation of a slightly higher Soviet level.

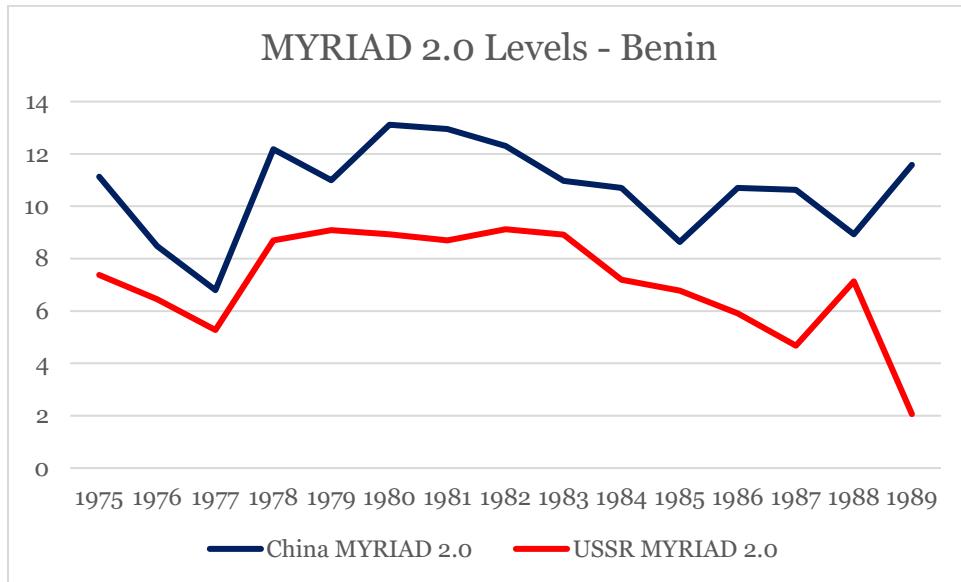
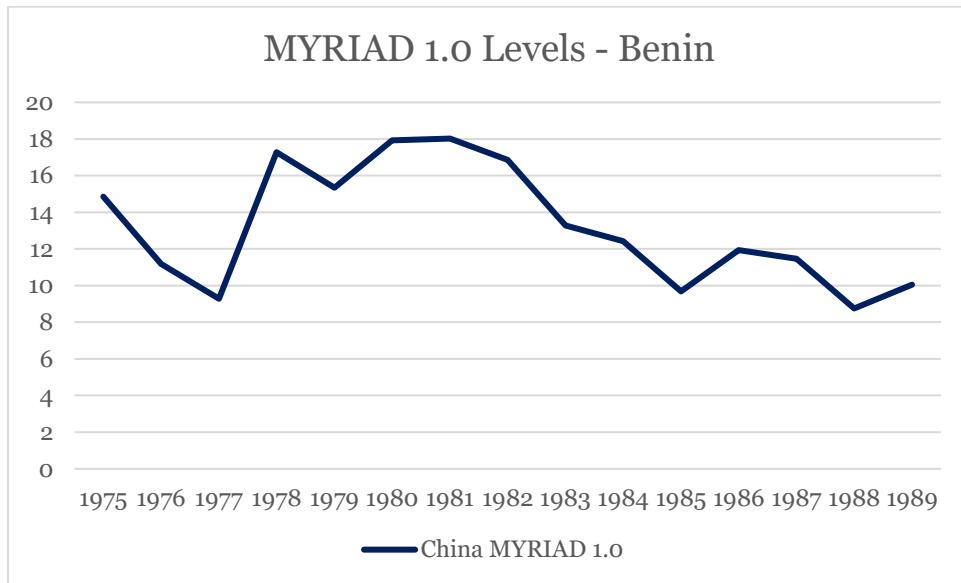
There is maximum FBIC and MYRIAD 2.0 coverage for China and the Soviet Union in Benin during the period of the Sino-Soviet Split. MYRIAD 1.0 only produces output for China, which covers the temporal range of interest. There are a number of significant differences between the outputs of the three measurements of influence in this case that should be analyzed. The general influence gap between China and the Soviet Union in Benin appears to vary in the two indices we have comparative data to utilize. The FBIC Index shows higher Chinese influence in the mid-1970s, although the gap is small and by scale both influence levels are marginal. MYRIAD 2.0 agrees with the higher Chinese influence and small difference. Chinese influence across the three appear to be in decline from 1975-77, with the reduction sharper in the MYRIAD 1.0 and MYRIAD 2.0 than FBIC. Interestingly, the Soviet Union's influence levels in the FBIC overtake China by 1978, while MYRIAD 2.0 shows China in the lead for the entire temporal period. The FBIC gap between China and the USSR throughout the 1980s is much more substantial, while the MYRIAD 2.0 difference remains fairly narrow. There is major disagreement on the comparative influence levels between the indices both in volume and advantage.

Chinese influence directions appear to have directional variations over time within the sample across all three measurements of influence, although the average level remains fairly static throughout. All indices show a Chinese influence drop in the late 1970s, followed by a rebound to the initial level in the early 1980s. Their influence begins to

slightly dip again and experiences slight ups and downs in the mid-to-late 1980s in the MYRIAD 1.0 and MYRIAD 2.0 indices. FBIC indicates a more stable, though less dramatic, drop during the same period. Soviet levels for FBIC and MYRIAD 2.0 depict an initial decline into 1977 before diverging significantly. FBIC measurements of Soviet influence starting in 1978 enter a period of major growth, jumping from less than 0.01 to 0.07 in only two years. During the same period, MYRIAD 2.0 depicts growth of Soviet influence, but it is far lower and never overtakes China's level. After this divergent period, both indices depict Soviet influence in steady decline until 1989. FBIC's output in 1989 ends at over 0.04, on a negative slope but not reaching the low point of 1977. MYRIAD 2.0's measure of Soviet influence takes a sample low in 1989 of 2, falling below the 1977 reading of just over 5. While the general directionality at the beginning and end of the temporal range appear to be similar for all three measures (Soviet measurements notwithstanding in MYRIAD 1.0), the era of the late 1970s and early 1980s appears to be the area of major disagreement between the indices as far as growth and positioning for China and the USSR.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 in the case of Chinese and Soviet influence in Benin during the Sino-Soviet Split appear to have substantial differences. Considering the historical context and the measurement output, only the FBIC Index would seem to support our hypothesis about higher, but still low, Soviet influence leading to them tacitly remaining in Moscow's camp. If the reality was as depicted in MYRIAD 2.0, we might expect Benin to have sided with China or at least made overtures in exchange for concessions, which we cannot find any historical evidence of occurring. It is more likely that if Soviet data was available for MYRIAD 1.0, it would show general directionality similar to MYRIAD 2.0, considering how closely their Chinese levels appear to match. The mutual agreement about the marginal levels of influence that both possess during the period is likely accurate, since neither played a large role in Benin's politics during the period compared to elsewhere in Africa. We cannot conclude with confidence that all three indices support our theoretical expectations, but accuracy based on historical context would likely support the FBIC Index, compared to what is observed in MYRIAD 2.0 and presumed in MYRIAD 1.0.





Bulgaria

The Soviet Union's military expelled the Axis forces from Bulgaria at the conclusion of the European front of World War II, remaining within the country to ensure stability and to advance their plan of installing a communist government. The Bulgarian communist who had long planned this takeover with the help of the Kremlin was Georgi Dimitrov, famous for his defiance during the 1933 Leipzig Trial in Nazi Germany in connection with the earlier Reichstag Fire, for which communists had been blamed. He had strangely been acquitted, but was exiled to the USSR in retaliation regardless of the judgment. Dimitrov returned to his native Bulgaria in 1946 to lead the renewed Bulgarian Communist Party (BKP) in their political takeover of the Soviet-occupied state. Opposition to the BKP was purged and although Dimitrov died a few years later, his communist regime continued as one of the most internally stable within the Eastern Bloc throughout the Cold War. Bulgaria was one of the USSR's closest allies due to historical ties and the pro-Soviet attitudes of their party leadership, so when the Sino-Soviet Split broke out they were quick to declare on the side of Moscow. Soviet-Bulgarian relations continued to remain strong until the fall of communism in 1989, with the BKP remaining an obedient servant of the CPSU at all times. The historical circumstances outlined here predict that the Soviets will maintain a substantial influence lead in Bulgaria for the entirety of their communist period, never challenged legitimately for plurality by China.

There is maximum coverage for China and the Soviet Union's influence in Bulgaria during the Sino-Soviet Split for both the FBIC Index and MYRIAD 2.0, with MYRIAD 1.0 only producing Chinese levels. The FBIC and MYRIAD 2.0 show a

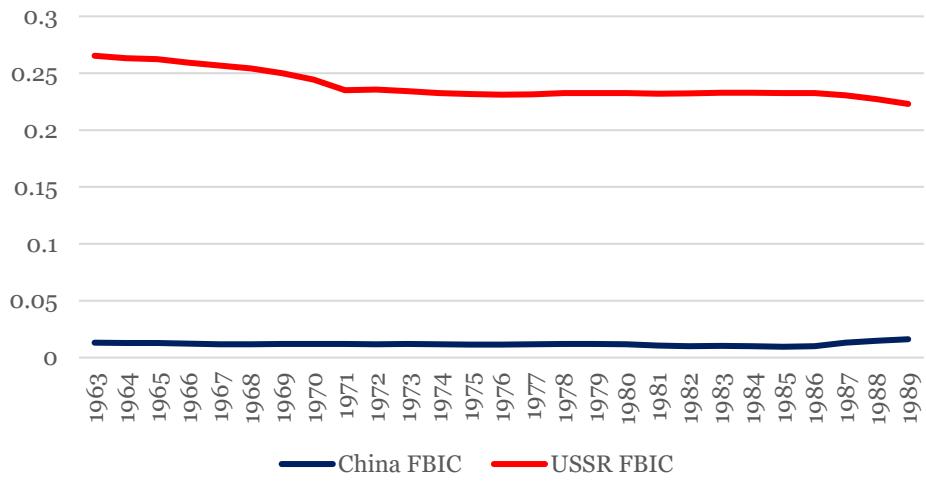
disparity between Chinese and Soviet influence that gives the USSR the lead throughout the entire period. Put to scale, there is major separation between the two, although that difference is less substantial in MYRIAD 2.0 than in the FBIC Index. The MYRIAD 2.0 index throughout the temporal range depicts at its largest only around a 10 point separation between the two states in Bulgaria, which put to scale is not as high as we would expect given Bulgaria's historical ties to Russia and their closeness to the Soviet party. The disparity we see for the FBIC Index is likely more accurate, with China having marginal influence below 0.01 while the Soviets maintain close to 0.25 for the entire period.

There are also a number of distinctions related to trends and directionality that merit some discussion as part of this analysis. Soviet levels appear to differ a bit between FBIC and MYRIAD 2.0. Initially high, FBIC displays a downward slope for almost the entire period for the USSR, concluding at a low point for the sample in 1989. MYRIAD 2.0 depicts a general increase until the mid-1980s, when they conclude in 1989 with a 14 measurement, somewhat higher than the low in 1963 of just over 12. It is reasonable to assume that during the pre-sample years of Stalin's rule and early in Khrushchev's tenure, Soviet influence over Bulgaria was even higher than what we observe here. The gradual withdrawal from complete authority over the Eastern Bloc would cohere with the direction seen in FBIC, although Brezhnev's reengagement may account for the slight shift upward in the MYRIAD 2.0 index after 1965. While that increase is theoretically valid, the low levels MYRIAD 2.0 displays in the early period are less likely than the higher amounts in FBIC.

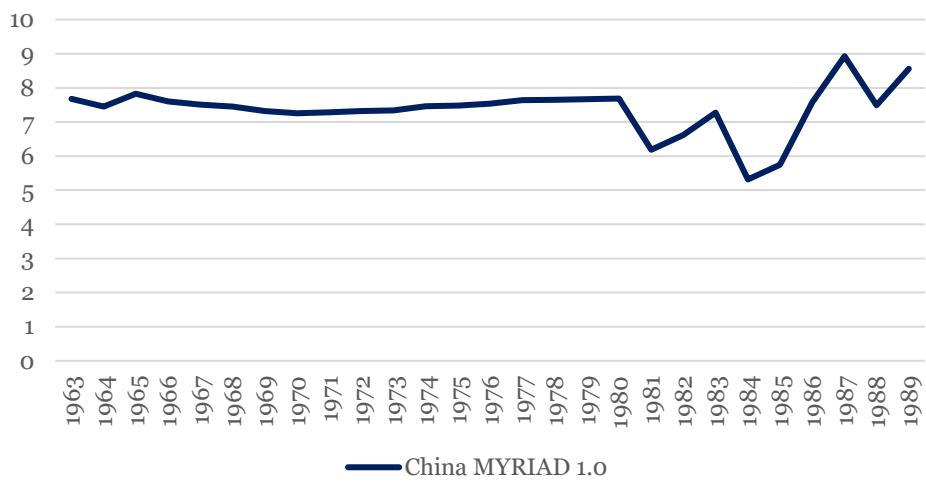
Directionality for Chinese influence across the three influence indices appear to be fairly consistent and at comparable levels. The period begins with marginal Chinese influence in Bulgaria and slightly increases toward the end of the Cold War, but never approaches anything nearing a position of substance, as we would expect. However, MYRIAD 2.0 put to scale shows a substantially higher Chinese level consistently throughout the period compared to FBIC and MYRIAD 1.0. The directionality of the slopes seem somewhat consistent; all three show growth in Chinese influence in the mid-1980s, but the FBIC Index change is more smooth compared to the jagged dips and elevations in MYRIAD 1.0 and MYRIAD 2.0. Examining the trends in influence, these disruptions appear to be smoother in MYRIAD 2.0 than MYRIAD 1.0 and could be due to data issues rather than indicative of particularly turbulent historical relations between the two states.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to generally portray accurate historical expectations for Chinese and Soviet influence in Bulgaria during the Sino-Soviet Split. Chinese influence remains low while Soviet levels are comparatively high, supporting our hypothesis regarding their vocal support for the CPSU during the conflict. There are some disagreements on the directionality of Soviet influence over time and the disparity between the two states' levels that provide contrasts in their modeling capabilities. There are also data smoothing differences in the Chinese output for MYRIAD 1.0 and MYRIAD 2.0 that do not seem rooted in any significant shifts in connections between them and Bulgaria. However, despite the separations, there is general agreement about the preponderance of Soviet influence that would be expected given the historical circumstances. We can conclude that all three influence indices in the case of Bulgaria appear to depict similar trends and descriptive information, with any differences reduces mostly to specific modeling issues.

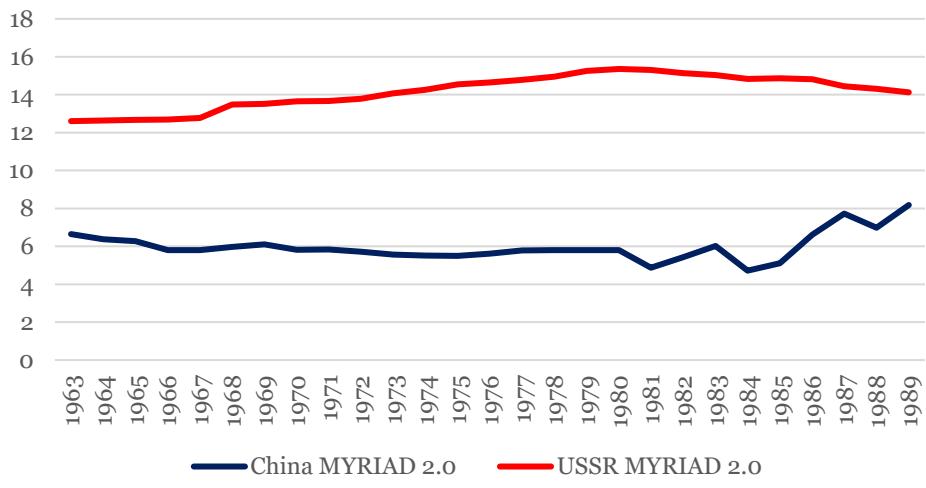
FBIC Index Levels - Bulgaria



MYRIAD 1.0 Levels - Bulgaria



MYRIAD 2.0 Levels - Bulgaria



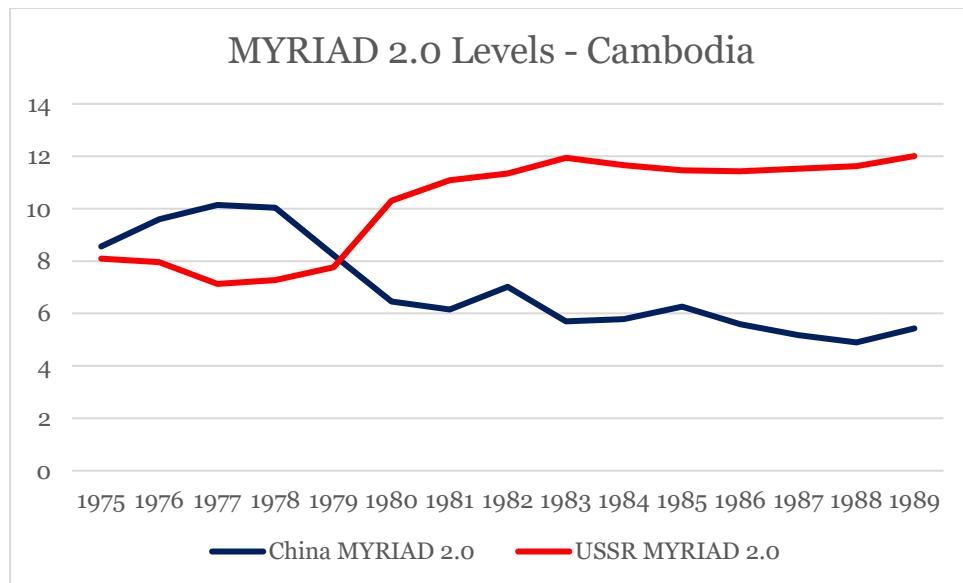
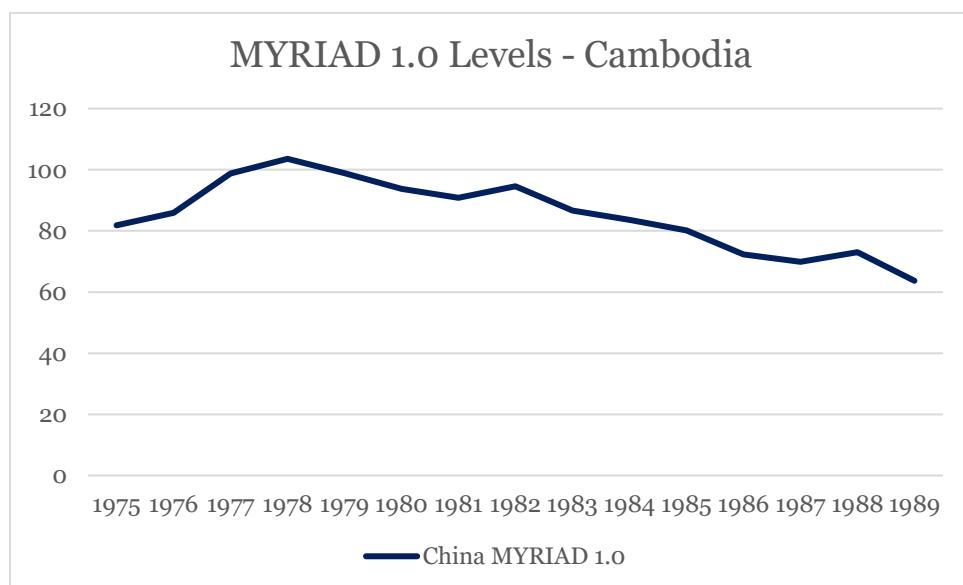
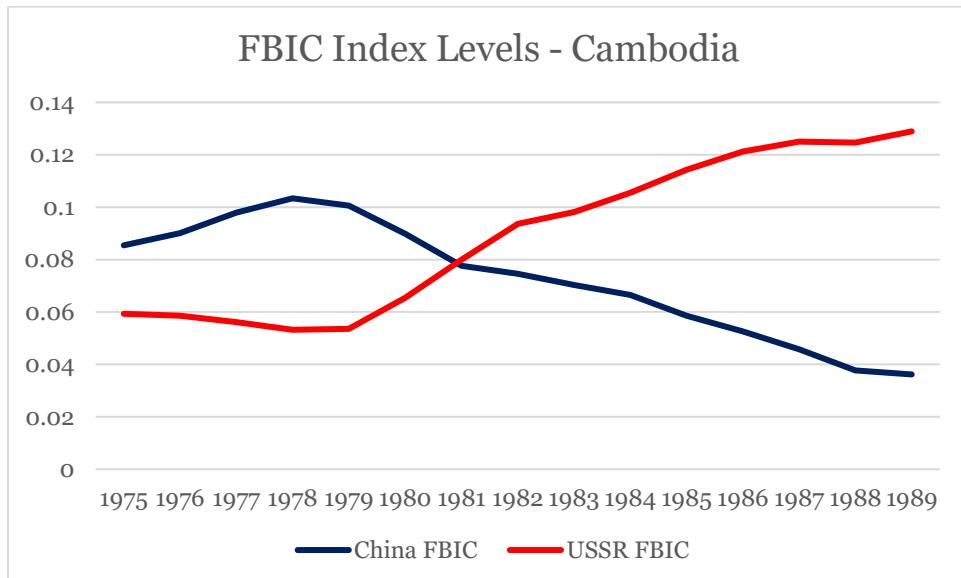
Cambodia

Following the conclusion of the Vietnam War, the Cambodian communist Khmer Rouge insurgency, with backing from the Vietnamese, seized power and declared a communist regime under the control of the ruthless Pol Pot. Despite aid from the pro-Soviet Vietnamese party, Pol was a staunch Maoist in his ideological disposition and immediately declared his support for Mao's China as the leader of the communist international movement. The Khmer government embarked on a brutal repression campaign and engaged in widespread mass murder of their supposed political opponents, many of whom were merely civilians with no involvement in politics. Vietnam was compelled to respond to the crisis being carried out on their border and launched an invasion with Soviet backing in 1979 to oust Pol from power, an effort which succeeded. The communist Cambodian government was purged and its leadership packed with pro-Soviet elites led by Heng Samrin. Heng's party reversed their alignment and declared allegiance to the Soviet Union, implicating Pol and his atrocities as a symptom Maoist Chinese influence. For the remainder of the Cold War, with support from the USSR and Vietnam, Cambodia resisted Chinese influence and remained loyal to Moscow. The historical circumstances outlined here indicate that the influence level for China in Cambodia will be higher during the Pol regime of 1975-79. Once Pol is ousted, Soviet levels will overtake China's and remain higher throughout the sample period.

There is maximum coverage in the FBIC and MYRIAD 2.0 for Chinese and Soviet influence in Cambodia during the period of the Sino-Soviet Split; MYRIAD 1.0 produces observations for China. We observe generally comparative trends in the influence disparity between China and the Soviet Union that narrow and separate as would be expected based on the historical context. FBIC and MYRIAD 2.0 display an initially larger level of Chinese than Soviet influence starting in 1975, when Pol Pot was in power. After the 1979 removal of Pol and installation of a pro-Soviet party leadership, the USSR's influence begins to overtake China's within a few years, separating more over time. The closeness of the influence lead crossover and the general separation appear to support our propositions about how patterns of influence should appear in Cambodia during the period.

Across all three indices, Chinese influence is fairly high in Cambodia during the Pol era of 1975-79. After his removal, all three display a strong downturn between the years 1979-81. After 1981 the FBIC and MYRIAD 1.0 show a more gradual and smooth decline, while MYRIAD 2.0 has a number of sharp rises that correct the following year. The three trend lines appear to be quite comparable in directionality and intensity throughout the period for China. The Soviet influence levels available in the FBIC Index and MYRIAD 2.0 also appear relatively similar in direction and intensity. During the Pol period, Soviet influence slightly declines prior to the leadership change in 1979. After this, Soviet levels rapidly increase and continue on a generally positive slope for the remainder of sample years. Soviet growth does appear to be different for FBIC and MYRIAD 2.0 during the period of 1983-1989. The FBIC Index displays consistent increases with only a minor decline between the years 1987-88, which reverses in 1989. MYRIAD 2.0 starting in 1984 enters a period of a very low inverse-U, marginally decreasing slowly between the years 1983-86 before again slightly increasing until 1989. This low-grade dip contrasts with the steady positive growth in the FBIC influence measurements for the same years. Considering the period of this contrast between the two indices occurred during the early 1980s before Gorbachev came to power and initiated disengagement, it is possible that modeling or data issues produce the trend observed, absent any historical pretext for such a decline.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all seem to generally agree on the directionality, lead position, and separation of levels for China and the USSR in Cambodia during the Sino-Soviet Split. The main historical event in this context, the removal of Pol Pot in 1979, is clearly observed in the FBIC and MYRIAD 2.0 measurements. Soviet influence crosses over Chinese and the two continue to move in opposite directions, creating a clear advantage for the USSR. General directionality for both states appear similar, minus some smoothing distinctions. If data was available to produce these observations, it is likely that we would observe similar patterns for Soviet influence in the MYRIAD 1.0 index. We can conclude that the FBIC Index and MYRIAD 2.0 confirm our theoretical expectations and quite accurately reflect the historical context of Cambodia's position in the Sino-Soviet Split. The output for all three indices are very similar and seem to be in general agreement on all analytical elements in this case.



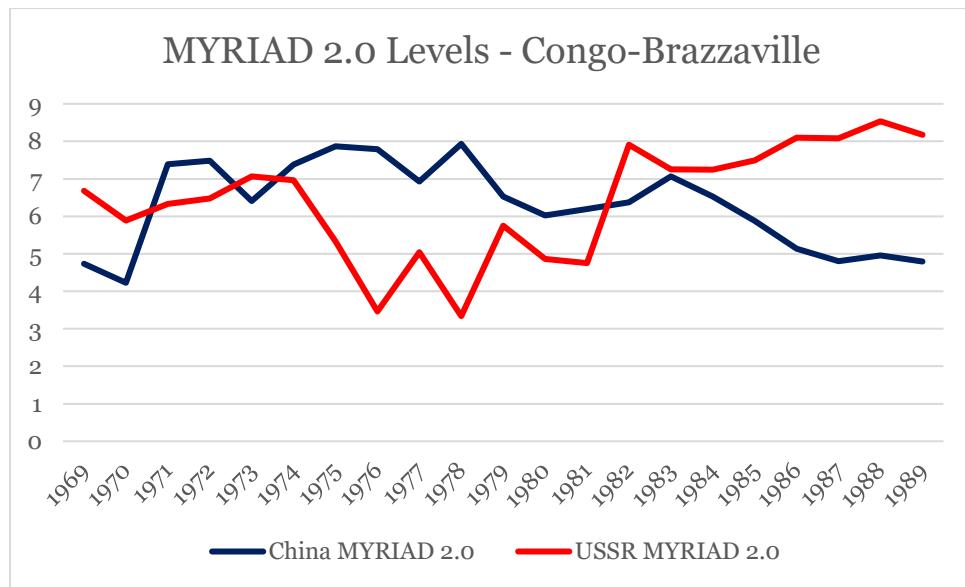
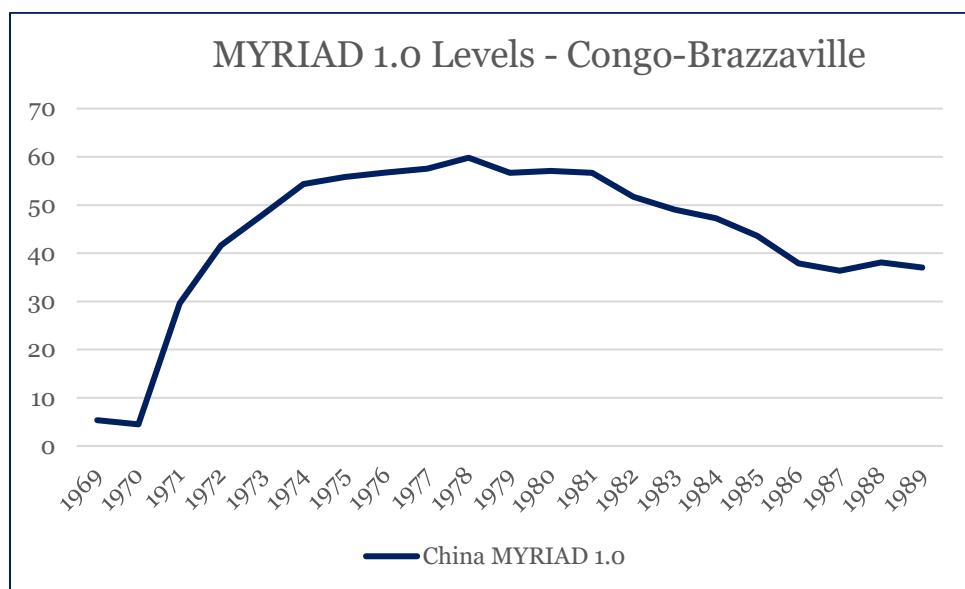
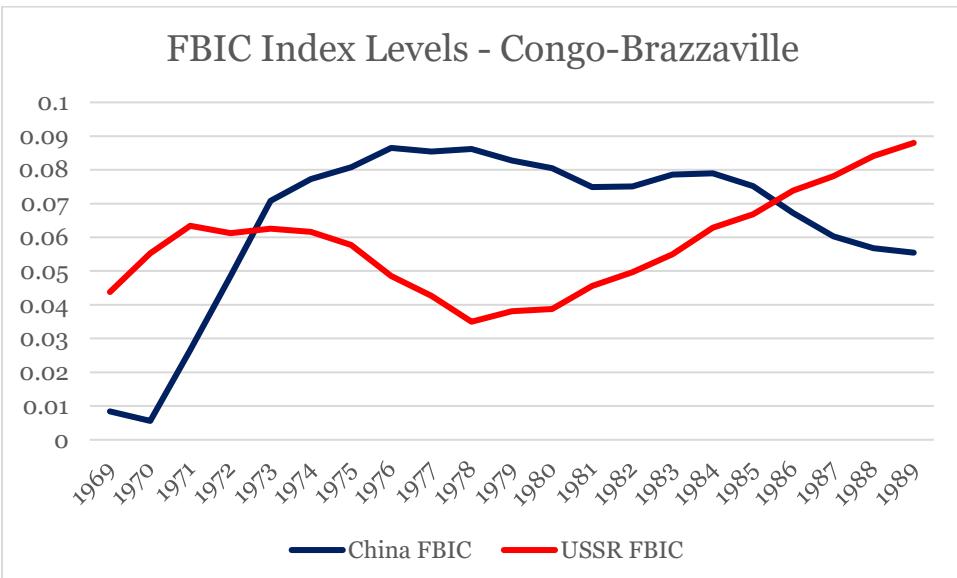
Congo-Brazzaville

Congo-Brazzaville achieved independence from France in 1960, as had many other African states in that year. The early years were extremely unstable, with several coups d'état and a brief military custodianship over the government. The civilian regime was eventually fully overthrown in late 1968 in a coup led by Marien Ngouabi, who seized power and a year later declared Congo-Brazzaville as a Marxist state and renamed it the People's Republic of the Congo. He organized the Congolese Labour Party (PCT), which would rule Congo-Brazzaville as a single-party communist state even after Ngouabi was assassinated in 1977. The PCT had established relations with the Soviet Union, China, and other communist states after coming to power. Although there were strong ties between the PCT and the Soviets, they never fully rejected China during the Sino-Soviet Split. Until the end of the Cold War, Congo-Brazzaville remained concerned with internal instability and did not involve it with the international ideological dispute. Like other areas of post-colonial Africa, the French also maintained strong ties with the People's Republic of Congo, despite their Marxist alignment. This likely made the PCT less likely to act as ardent communists in the face of possible French intervention, as had happened elsewhere in the continent. Congo-Brazzaville eventually held multi-party democratic elections in 1992 and transitioned out of the communist era. The historical details outlined here lead us to predict that the indices will show a larger level of influence for the Soviets, but not enough of one to make Congo-Brazzaville come out against China.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all indicate that Chinese and Soviet influence in Congo-Brazzaville during this period remained fairly marginal. The low comparative levels in the beginning of the period show a slightly higher Soviet level of influence, which narrows going into the early 1970s. Chinese influence overtakes Soviet for most of the 1970s and into the 1980s, before the USSR takes the lead again during the mid-1980s. The widest influence gap between the two appears to be during the late 1970s, when the Soviet Union was engaged primarily in East Africa during the Ogaden War. The Soviet decline also does not appear to be the consequence of China, as their influence levels do not correspondingly increase. Generally, the two crossovers are consistent across FBIC and MYRIAD 2.0 and there appears to be comparable directionality throughout the period.

Chinese influence across the three indices begins in 1969 at a low level, declining into 1970 consistently. Their influence levels continue to increase generally throughout the 1970s, reaching a sample high from 1977-78. This increase appears smoother and more consistent in the FBIC Index and MYRIAD 1.0; MYRIAD 2.0 displays several sharp dips and corrections in 1973 and 1977. The influence levels for China in the late 1970s and early 1980s appear to enter a general decline until 1989, signaling a general disengagement that is captured in all three indices. The slight increase from the downward trend in 1983 seen in FBIC and MYRIAD 2.0 is comparable, while MYRIAD 1.0 only continues to decline. Soviet influence in Congo-Brazzaville in FBIC and MYRIAD 2.0 starts at a slightly higher level than China, although to scale these numbers are still fairly minimal. Both indices trend upward for Soviet influence before starting to decline from 1974-78. The FBIC decline is much smoother than MYRIAD 2.0, which takes several jagged dips in 1976 and 1978. After 1978, Soviet influence gradually increases in Congo-Brazzaville for the remainder of the temporal period. The FBIC Index produces a steady upward slope, reaching a sample high just under 0.09 in 1989, still comparatively small in scale. MYRIAD 2.0 also shows an upward trend, but there are more volatile changes after an initial sudden boost of over 3 units in 1981-82. While the trends appear generally similar, the gradual versus sudden shifts between FBIC and MYRIAD 2.0 are a notable difference.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 appear to display fairly similar trends, especially relating crossovers in who possesses the lead influence position between China and the USSR over the temporal sample. The low levels of influence between China and the USSR, as well as the slightly higher Soviet levels in 1969, seem to support our hypothesis about Congo-Brazzaville's passive support for the CPSU in the conflict. It is interesting that two of the indices show Chinese influence overtaking the Soviet Union for much of the 1970s, which may only appear significant at the scale. Directions and trends appear to be consistent, although MYRIAD 2.0 is noticeably more volatile in influence changes than FBIC or MYRIAD 1.0. We can conclude that all three indices appear to maintain comparative agreement on the case of Chinese and Soviet influence in Congo-Brazzaville during the period of the Sino-Soviet Split.



Cuba

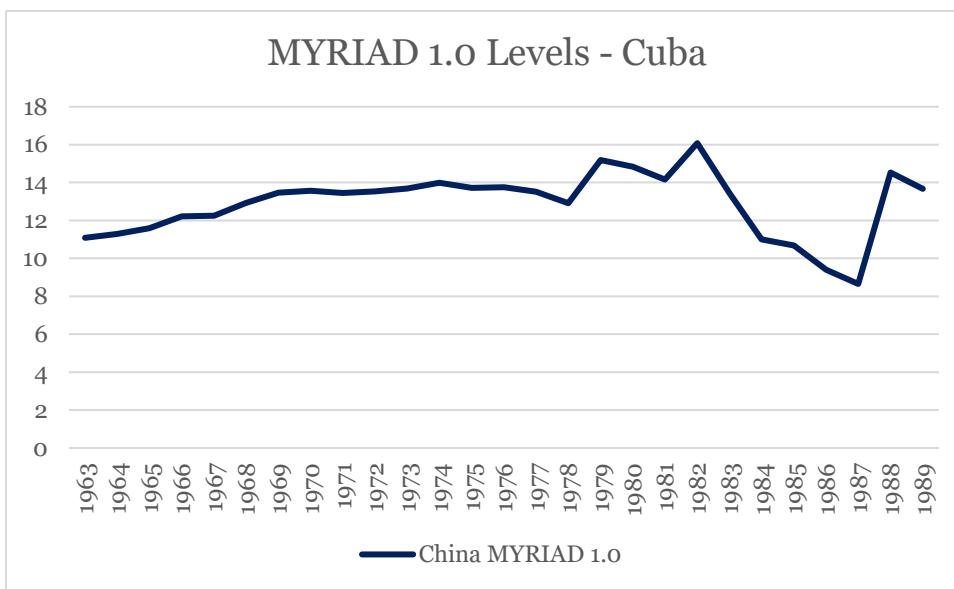
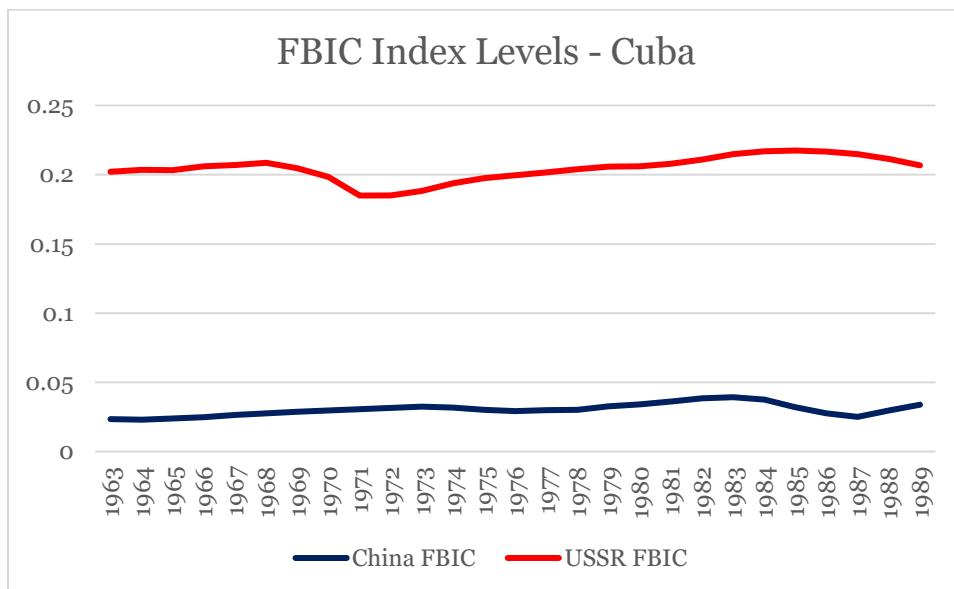
The Cuban Revolution of 1953-59 eventually resulted in the defeat of the conservative Batista government and the seizure of political power by the 26th of July Movement, which was led in part by communist guerillas under the command of Fidel Castro. Once regime control was established in 1959, Castro became Prime Minister and initiated a Marxist reorganization of the government under the Communist Party of Cuba. Although they were not initially aligned, American attempts to overthrow the new Cuban regime pushed Castro's government to make connections with the Soviet Union. After the failure of the US-backed Bay of Pigs invasion, Cuba leaned further into communist control and rapidly advanced military relations with the Soviet Union. Soviet Navy vessels were granted basing access in several Cuban ports and their armed forces permitted to operate on Cuban land. Joint signal intelligence facilities were established in Cuba with the help of Soviet technical advisors. In 1961-2, the Soviets even were permitted to deploy nuclear-equipped missiles in Cuba, which led to the infamous Cuban Missile Crisis and American naval embargo of the island. Although this tense period resulted in the denuclearization of Cuba, the Soviet military continued to operate extensively around the island and economic connections were expanded. Cuba eventually developed into a military proxy for the Soviet Union in Latin America and Africa, participating in several internationalist interventions in places like Angola, Ecuador, and Ethiopia. After the Sino-Soviet Split broke out, the Cubans initially took a position of supporting Moscow gingerly, but later became more aggressively pro-Soviet. Heavily reliant on Soviet backing throughout the Cold War, especially with America working diligently to undermine the regime, the Cubans remained staunch allies of the USSR. Considering the historical context, we expect substantial Soviet influence over Cuba for the entirety of the Sino-Soviet Split period, reflecting their support for Moscow over Beijing.

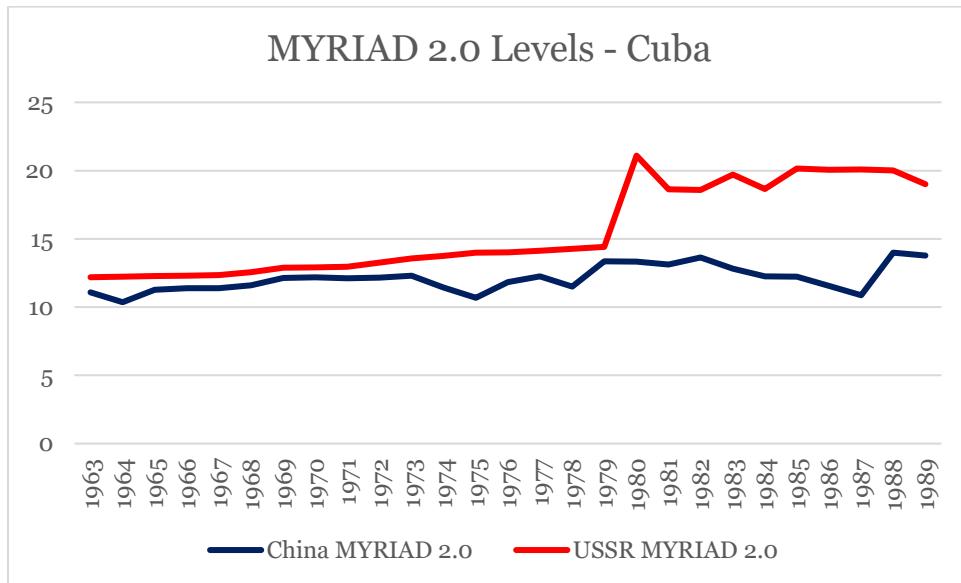
There is maximum China and USSR influence coverage for FBIC and MYRIAD 2.0 in Cuba during the period of the Sino-Soviet Split, with MYRIAD 1.0 only displaying output for China. There are some significant differences between FBIC and MYRIAD 2.0 regarding the levels of influence over time and the separation between the two. There is major disparity between China and the Soviet Union in the FBIC Index, with the USSR in Cuba maintaining around a 15 unit advantage for the entire period. Contrast this wide separation with the output for MYRIAD 2.0, which oddly indicates that for most of the 1960s and 1970s, the USSR barely maintained an influence advantage over China. This is peculiar considering the historical context of the political closeness and military presence of the Soviet Union in Cuba, whereas China engaged with them to a substantially lower degree. It is more likely that the FBIC Index in the level separation is more accurate, with the USSR maintaining a substantial advantage compared to marginal Chinese influence throughout the temporal period. Particularly accounting for the fact that the USSR had nuclear missiles on the Cuban mainland just prior to this sample, it strains credibility that China's influence would approach anything near the Soviet Union within Cuba.

Chinese influence levels across the three indices remain fairly stable, but minimal, from the beginning of the sample period until the mid-1970s. At that point, MYRIAD 2.0 begins to show some signs of low-level volatility, but it evens out by the early 1980s. MYRIAD 1.0 has a series of sharp increases in the early 1980s followed by a sharp decrease in the mid-1980s for China, which is only slightly present in MYRIAD 2.0 and FBIC. The FBIC's output in the late-1980s only shows a very small and gradual decrease in Chinese influence that recovers by 1989, far less sudden than in MYRIAD 1.0. Despite the sudden increases and decreases in the 1980s, all three agree that Chinese influence remains small and fairly even throughout the period. Soviet influence levels differ somewhat between FBIC and MYRIAD 2.0. The FBIC displays a small decrease in 1971 that turns into a consistent positive slope starting the following year; this dip is not seen in the MYRIAD 2.0's measurement output. MYRIAD 2.0 in 1980 observes a very sharp and high spike in Soviet influence levels, climbing around 8 units before declining only slightly and plateauing until 1989. FBIC does not observe this change, instead depicting gradually increasing Soviet influence above 0.2 until there is a low-level decrease back closer to 0.2 by 1989.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to indicate higher Soviet influence over Cuba compared to China, as would be expected. However, trends in growth and the comparative disparity between the influence levels are notable differences between the indices. Most significant is the separation in levels between FBIC and MYRIAD 2.0, with the wider disparity seen in the former being likely closer to accurate, considering the historical context. There are also the usual differences in the smoothness of influence changes over time, with Chinese levels in the 1980s for MYRIAD 1.0 being more sudden than in the other two indices. There are major variations between the three indices in their

measurements of Chinese and Soviet influence in Cuba during the Sino-Soviet Split. Technically, FBIC and MYRIAD 1.0 confirm our hypothesis about their support for Moscow, but only FBIC's levels explain why they were vocal supporters of the Soviet line against Beijing. This provides another indication that the FBIC levels and separation are likely closer to the truth than the output we see with MYRIAD 2.0.





Czechoslovakia

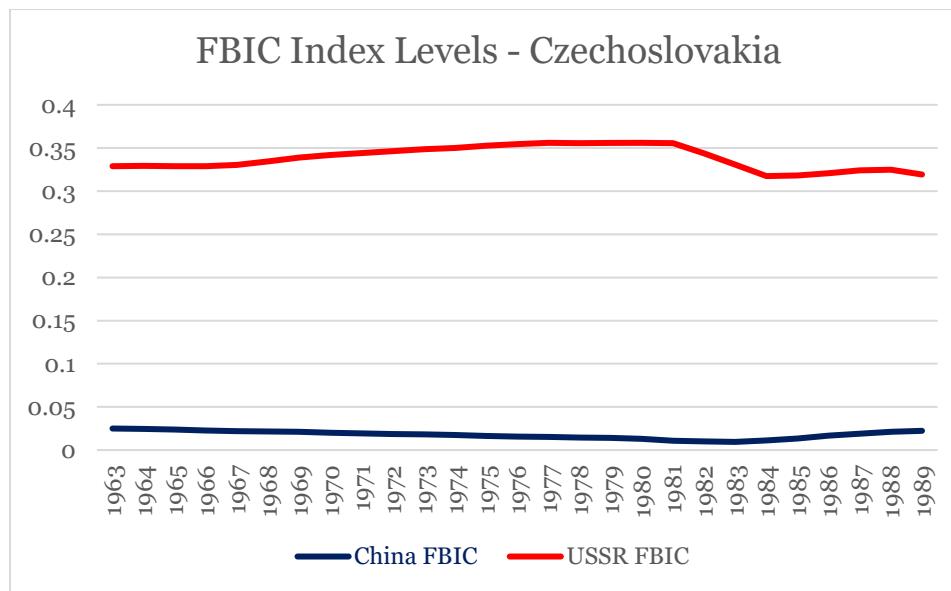
The Communist Party of Czechoslovakia (KSC) was in an interesting position at the end of World War II. Like other East European communists, they journeyed home after years in the Soviet Union as refugees, returning on the tail of the Red Army invasion. The KSC was unique in that they had a strong history of electoral success compared to the other communist parties in the region, who had been mostly fringe movements. The Czechoslovak communists had run fairly successful campaigns in several pre-war democratic elections and maintained one of the larger membership rosters within the old Communist International. They arrived home with a strong institutional base and a popular familiarity that made them appear less like invaders looking to seize power in the eyes of the population. However, they followed Soviet instructions like the other East European communist parties and found ways to institutionally marginalize their opponents. The government was seized by the KSC in 1948 following a bureaucratic coup backed by the implied threat of the occupying Soviet military, securing a single-party Marxist regime that was in pro-Moscow hands. The first leader, Klement Gottwald, was already Prime Minister of Czechoslovakia after he led the KSC to a plurality victory in the first post-war election. Gottwald was a Soviet loyalist and worked to secure power within his party and to orient their allegiance in the rank-and-file toward obedience to Moscow. Although Gottwald followed Stalin to the grave in 1953, his party continued its staunch pro-Soviet position into the Sino-Soviet Split of the 1960s. The hardliner Politburo led by Antonin Novotny denounced China and sided vocally with Moscow. Even throughout the tumultuous leadership change and uprising in 1968 that prompted the Warsaw Pact to invade, the Czechoslovakian party remained loyal to the USSR. Coming out of the “Prague Spring” the KSC purged of liberal reformists, and the leadership packed with Moscow apparatchiks. The new General Secretary, Gustav Husak, maintained the pro-Soviet line for the duration of his rule into 1987. The historical events indicate there should be substantial Soviet influence within Czechoslovakia, supporting the fact that they remained vocal supporters of the USSR during the Sino-Soviet Split.

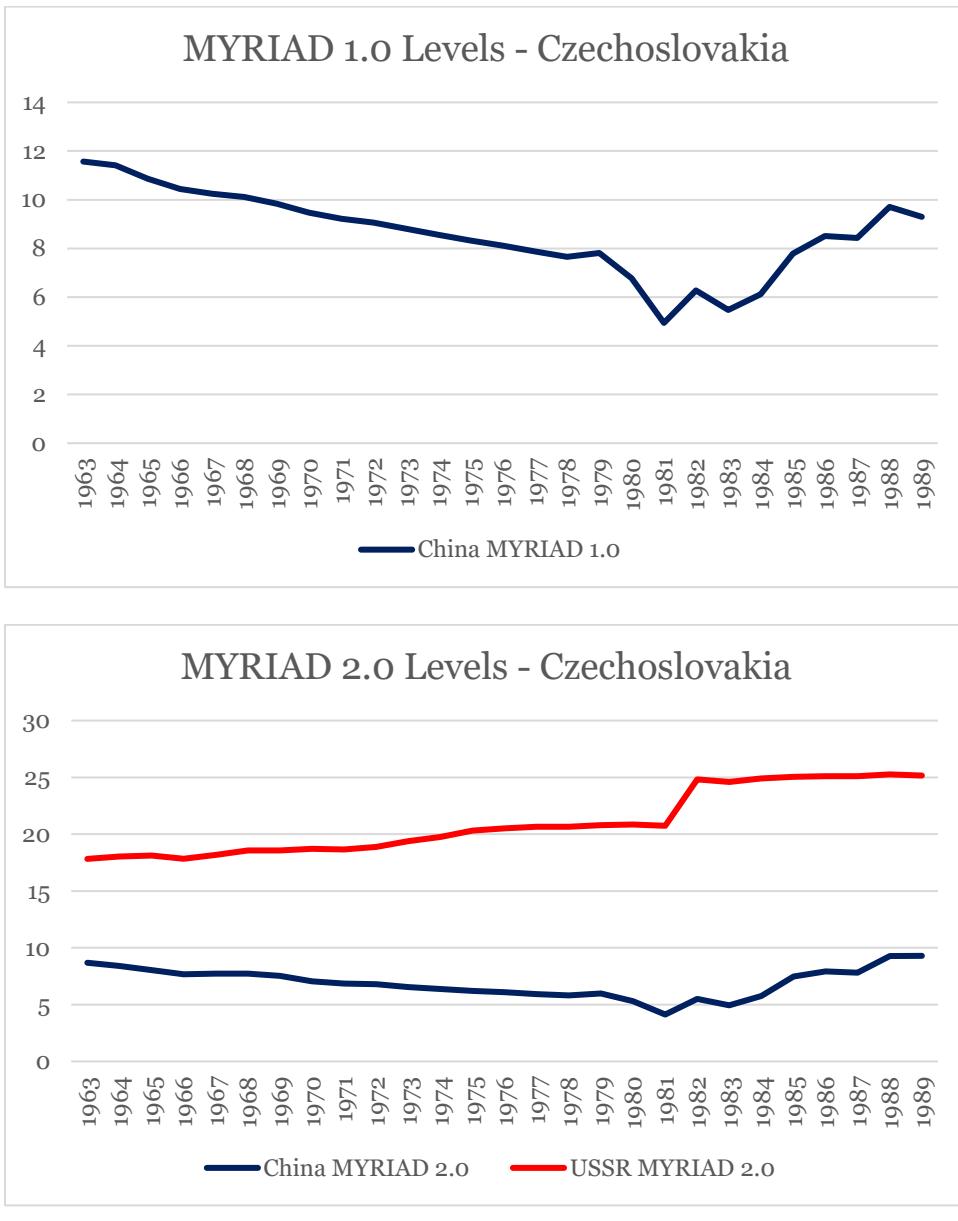
There is maximum coverage for all three measurements of influence for China and the Soviet Union in Czechoslovakia during the period of the Sino-Soviet Split. Notwithstanding the lack of Soviet data in the MYRIAD 1.0 index, there seems to be general agreement on the substantially higher influence of the USSR compared to China. The FBIC Index shows a large Soviet influence level within Czechoslovakia throughout the period, as would be expected considering their massive military presence within the state. There is an interesting increase following the 1968 Prague Spring uprising, likely due to greater arms transfers to the regime during the “normalization” period when liberal elements of society were purged or repressed. A slight decline occurs from 1981-84, perhaps a consequence of redirected efforts to Afghanistan. MYRIAD 2.0 also depicts a general increase of Soviet influence throughout the period, but there is a major jump in 1981-82 that levels out the following year. There is no certain historical context to explain this increase, particularly the degree of the shift. It

is likely that when comparing available Soviet influence measures between the two, the FBIC Index is probably more reflective of the period, particularly the withdrawal of Soviet influence during the mid and late 1980s.

There is full Chinese coverage for the period and all agree that there is a substantial deficit they face in Czechoslovakia compared to the Soviet Union. The FBIC Index indicates that Chinese influence for the entire period remains marginal, only increasing slightly during the mid and late 1980s. MYRIAD 1.0 appears to be dramatically different with its sharp decreases and general negative slope, but this is more a matter of scale than effect. The Chinese levels in this index are comparatively small when considering higher influence levels achieve observations in the hundreds. Thus, this slope appears steeper than it actually is in the context of the index's output range. The rather sharp declines in 1981 and 1983 stand out compared to the previous gradual movements downward. The suddenness of these moves is likely a condition of the data rather than reflecting any actual worsening of Chinese-Czechoslovak relations during the period, as their contact remained fairly minimal up to and including these years. MYRIAD 2.0 also displays these sudden drops in Chinese influence in the early 1980s, although they appear to be less dramatic. The decline throughout the 1960s and 1970s matches the other two indices, as well as the increase in the mid and late 1980s. What is interesting about the MYRIAD 2.0 levels is the influence disparity between China and the USSR appears much narrower than the FBIC or likely would appear in MYRIAD 1.0 if it were available. Considering the historical situation, the gap presented in the FBIC Index is probably more reflective of the high Soviet and minimal Chinese influence in Czechoslovakia that occurred; even in 1963 it was not plausible that their influence levels approached the level of proximity seen in MYRIAD 2.0.

The FBIC Index and MYRIAD 2.0 appear to reflect the substantially higher Soviet influence in Czechoslovakia compared to Chinese that we would expect given the historical context. These measurements allow us to confirm our expectation that this disparity would lead the Czechoslovak regime to be a vocal supporter of the USSR during the Sino-Soviet Split, as they were. MYRIAD 1.0 unfortunately does not allow us to extrapolate much information on the situation, although we can note that the influence levels for China seen for that index are relatively small, as would be expected. The major differences are the separation between Chinese and Soviet influence and the direction of Soviet influence changes in the mid-to-late 1980s between the FBIC and MYRIAD 2.0. Considering the Soviet military presence in Czechoslovakia and their withdrawal from internationalist involvement (besides Afghanistan) in the mid-1980s, it is more likely that the FBIC Index reflects the situation more accurately. We can conclude that FBIC and MYRIAD 2.0 confirm our expectation about where Czechoslovakia fell in the Sino-Soviet Split, there is substantial disagreement between the indices about the actual levels and directionality over time that cannot be reconciled.



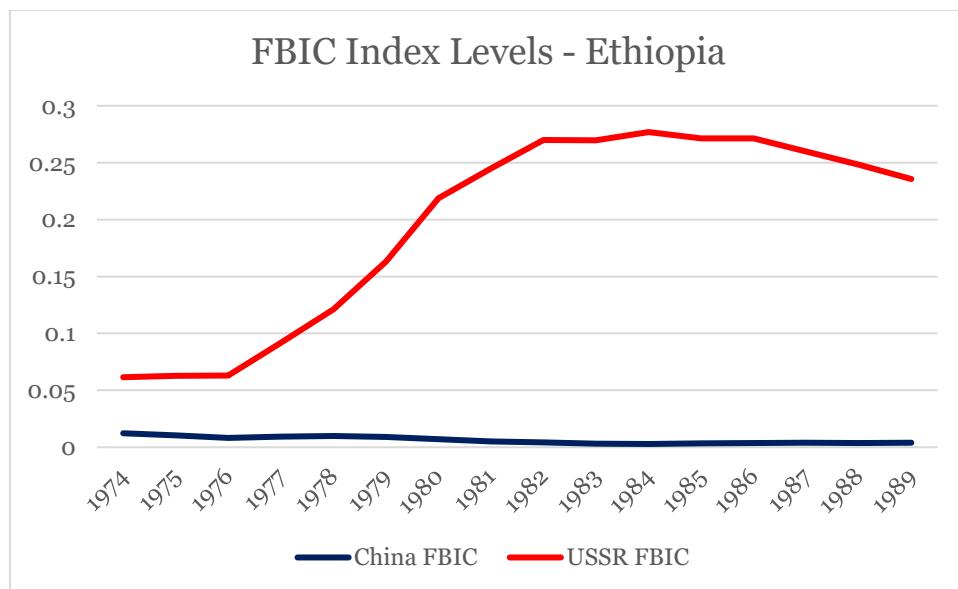


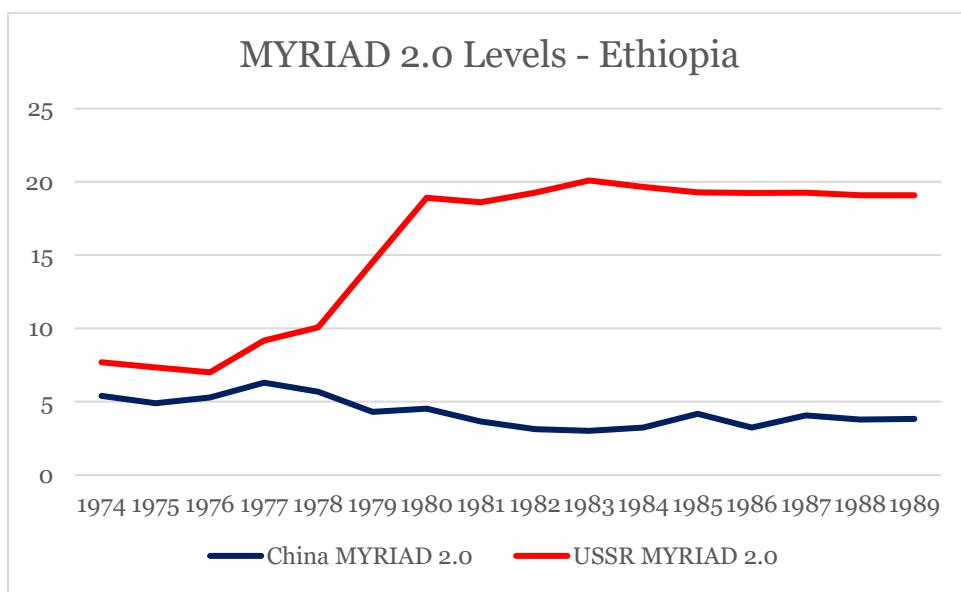
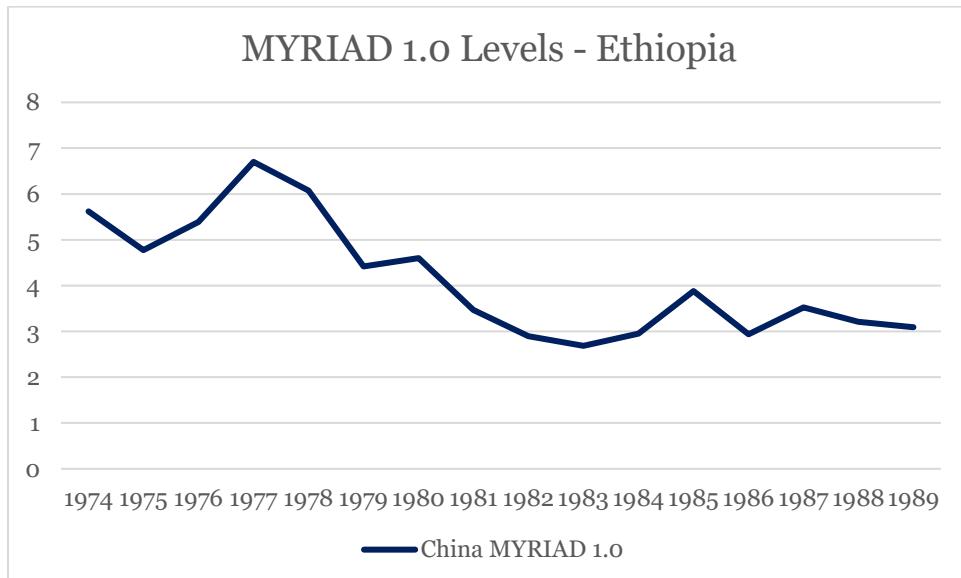
Ethiopia

The long rule of internationally renowned Emperor Haile Selassie of Ethiopia came to an end in 1974 through a coup d'état led by military officers organized under a revolutionary group known as the Derg. Selassie was captured and placed under house arrest before eventually being forced to abdicate and sent into exile. The Derg seized control and established a government along the lines of a Marxist-Leninist single-party dictatorship. Communist Ethiopia initially received marginal support from the communist bloc compared to neighboring Somalia, but this trend reversed after the two states went to war over the separatist Ethiopian region of Ogaden that Somalia was attempting to annex. Shortly after pro-Soviet Ethiopian officer Mengistu Haile Mariam seized control of the Derg in an intra-party coup, Somalia launched a military invasion to take the Ogaden. Having been rebuked by Somalia and looking to back Mariam, the Cubans, Soviets, and other Warsaw Pact states sent military personnel and technicians to Ethiopia in 1977. Despite initial setbacks, Ethiopia was able to defeat the Somali offensive, which led Somalia to reject Moscow and align with Beijing in an ill-conceived ideological retaliation. In appreciation for the foreign aid, Ethiopia remained pro-Soviet in its alignment. However, plagued by the Somali threat and Eritrean separatism, they never came out aggressively against Beijing. This was likely due to more pressing concerns over domestic instability that may have been worsened if the Chinese decided to back their enemies. The historical case of Ethiopia leads us to hypothesize that the index levels will show a Soviet influence lead over China, supporting their alignment with the announced but fairly docile support for the USSR in the Sino-Soviet Split.

There is maximum coverage for China and the Soviet Union in Ethiopia within the FBIC Index and MYRIAD 2.0; Soviet influence measurements are unavailable due to data limitations. There appears to be general agreement across the three regarding the minimal Chinese influence for the entire temporal period, with a decline over time that coincides with an increase in Soviet influence. The Chinese negative slope is smoother and more gradual in FBIC and MYRIAD 2.0, while there are more sudden increases and decreases in MYRIAD 1.0 that do not coincide with any historical context that could explain these shocks to their influence. There is agreement also that Soviet influence is substantially higher than Chinese in Ethiopia, particularly after they began actively engaging with the Ethiopian communist regime as a result of Somalia's aggression in the Ogaden War. This is reflected in both FBIC and MYRIAD 1.0 as between 1976-80 the influence of the USSR in Ethiopia more than triples across both. The Soviet presence, coupled with Cuban military involvement, brings a large amount of influence throughout the 1980s, elevating the USSR over China by a substantial degree. This continues until the mid-1980s, when Soviet international engagement wanes and we see a corresponding gradual decline in their influence as a result. China does not appear to exploit this opening as we see, likely due to their relationship with neighboring Somalia, who was still hostile to Ethiopia during this period.

The FBIC Index, MYRIAD 2.0, and to a degree MYRIAD 1.0 all appear to accurately reflect the conditions of Soviet and Chinese involvement in Ethiopia during the period of the Sino-Soviet Split. Our hypothesis predicting Ethiopia's shift to being staunchly pro-Soviet after a major increase in their influence appears to be validated in at least two of the indices. All three agree that there is marginal Chinese influence across the period, as would be expected, and the directionality appears to be largely comparable. Any sharp increases or decreases in Chinese influence are small when accounting for scale. The Soviet Union's massive increase in influence following their involvement in the Ogaden War on the side of Ethiopia appears clearly in FBIC and MYRIAD 2.0, giving some very positive support for the concept validity. Major differences in this specific case come down to smoothness of the indices over time and the unfortunate lack of Soviet data in MYRIAD 1.0. We can conclude that in the case of Ethiopia, all three indices as available appear to accurately reflect the historical context of the Soviet Union and China's involvement in the state during the Sino-Soviet Split.



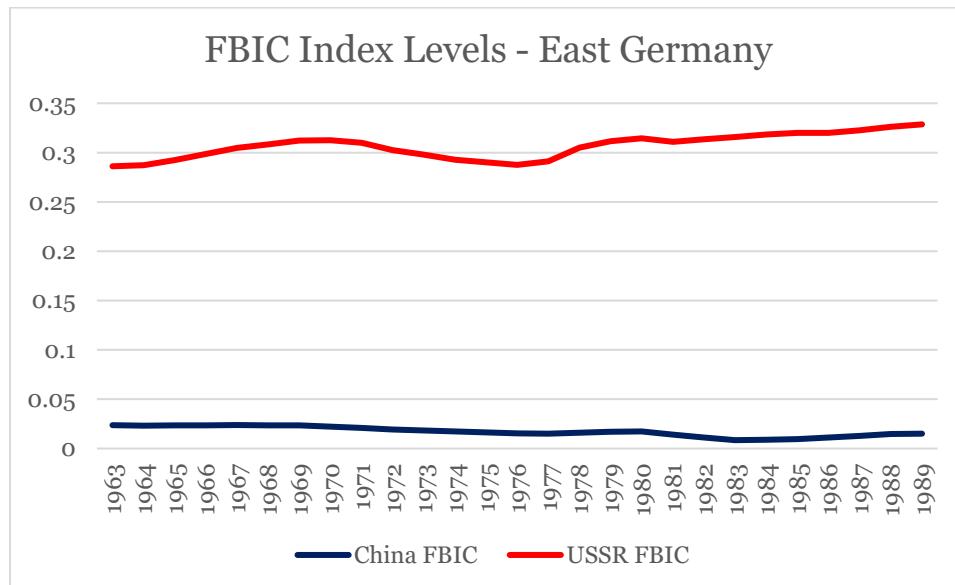


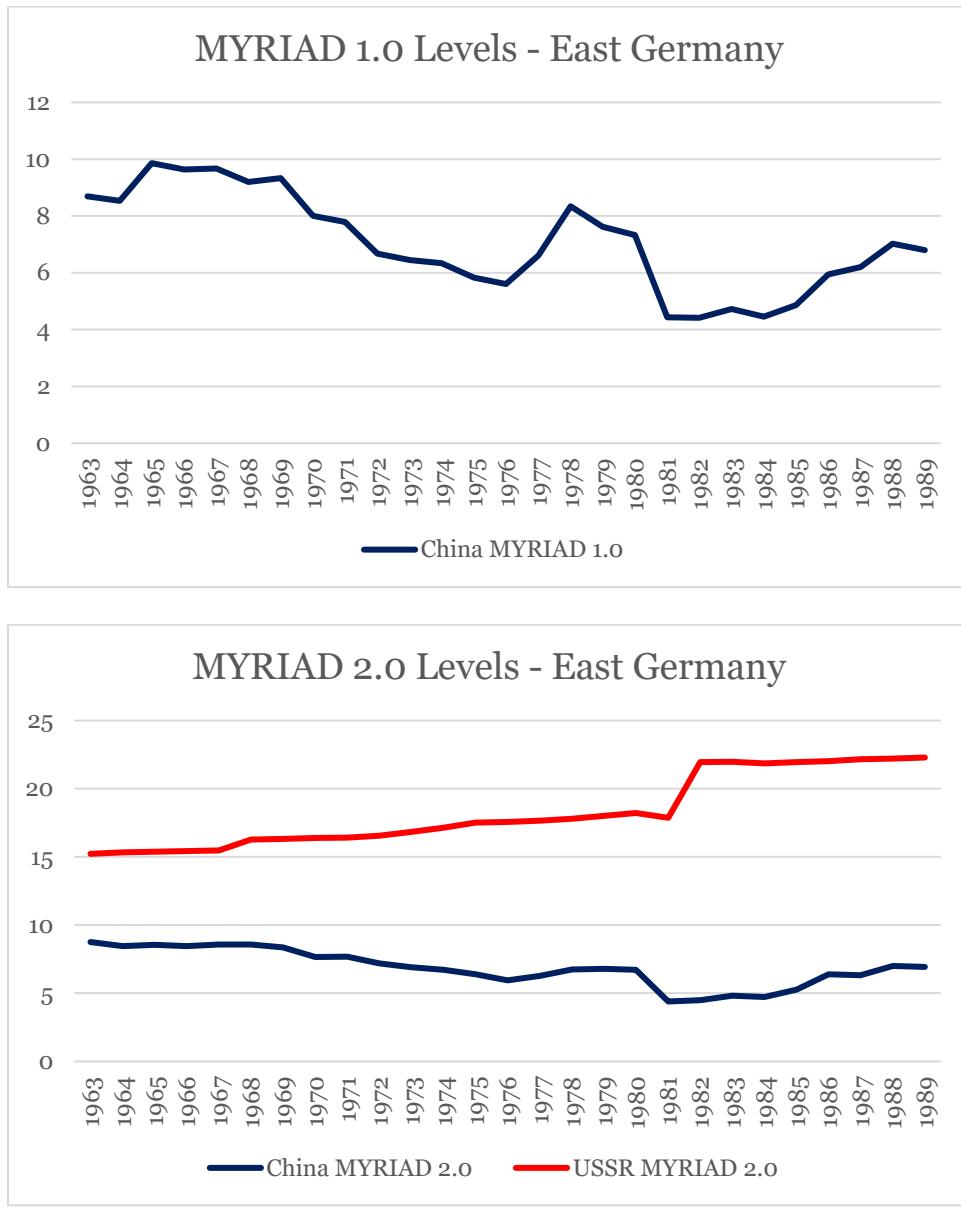
German Democratic Republic

At the conclusion of the European Theater of World War II, Germany was occupied partially by the Soviet Union in the eastern portion of the country and the United States, United Kingdom, and France in the western zones. An arrangement between the Allies established military occupation sectors, but an agreement was never reached on how to organize a unified post-Nazi government in Germany. The state of Germany defaulted into two occupied zones that eventually transitioned into two de facto states. The Soviet sector was consolidated into the German Democratic Republic (commonly East Germany), which was ruled by the communist Socialist Unity Party of Germany (SED). The SED's leadership was mostly formed by pro-Moscow Germans who had resided in the Soviet Union throughout the war, being trained to one day return to Germany and seize the government. The sentiments of the elites and the continued presence of the Soviet military in East Germany led to extremely close fraternal ties between the two states. Throughout the Cold War, the East Germans remained one of the USSR's most ardent supporters and after the Sino-Soviet Split would be a vicious mouthpiece for Soviet ideological attacks against China. Their loyalty never wavered and throughout the period they continued their support for the Soviet Union's place as the leading power of the communist bloc. The historical circumstances outlined indicate that there should be strong Soviet influence within East Germany throughout the period and low Chinese influence, supporting the general hypotheses and actual conditions.

There is maximum FBIC Index and MYRIAD 2.0 coverage for China and the USSR in East Germany during the Sino-Soviet temporal period. MYRIAD 1.0 only has Chinese influence measurements during these years. As expected, FBIC and MYRIAD 2.0 show a substantially higher level of Soviet influence over East Germany throughout the entire year range, with Chinese influence remaining minimal. The gap of this difference is notable between the two indices, as FBIC displays a much larger difference compared to MYRIAD 2.0, particularly during the early-to-mid 1960s. There is no historical context to explain the close influence levels between China and the Soviet Union in East Germany between the years 1963-66. East Germany at the time was perhaps the most ardent supporter of the Soviet party, with the SED's leader Walter Ulbricht being an active mouthpiece for Khrushchev in the ideological conflict. This gap widens as time goes on in both cases, although the increasing separation appears less dramatic in the FBIC output than MYRIAD 2.0, due to scaling and the oddly close influence in the later. All three indices show a general decline for China over time, which coheres with the historical context of the USSR's domination over East Germany. The general increase of Soviet influence is actually quite interesting, because the leadership shift in 1973 for East Germany was one of the more regulated in East Europe at the time and shows minimal disruption on Soviet influence. The only major disruption we can observe is in the case of the MYRIAD 1.0 output for China, when between the years 1977-81 there is a large bump in influence that drops back to the anticipated slope rapidly. This spike does not coincide with any major events in East Germany and appears to be abnormal when taken into context with the other indices and even the general trend in MYRIAD 1.0 for that period.

The FBIC, MYRIAD 2.0, and to a degree MYRIAD 1.0 appear to accurately depict the historical context of Chinese and Soviet influence in East Germany during the period of the Sino-Soviet Split. Our hypothesis predicting their vocal support for the USSR if Soviet influence was substantially higher than Chinese appears to be confirmed in all cases, with the inferred confirmation in the MYRIAD 1.0 stemming from probably expectations and the observed low level of China's influence there over time. All three indices show Chinese influence waning over time, with the FBIC and MYRIAD 2.0 showing an agreed upon increase in Soviet levels. The major differences come from the suddenness of the MYRIAD 2.0's late Soviet influence spike and the bump of Chinese influence in the late 1970s. Neither of these have much historical context to draw from to support them representing an actual shift in relations between both states and East Germany. The large difference in influence depicted in the FBIC Index is likely more reflective of the actual conditions. We can conclude that while all three indices as available seem to agree on separation and directionality, the FBIC Index is probably the closest to accurately displaying the historical conditions.





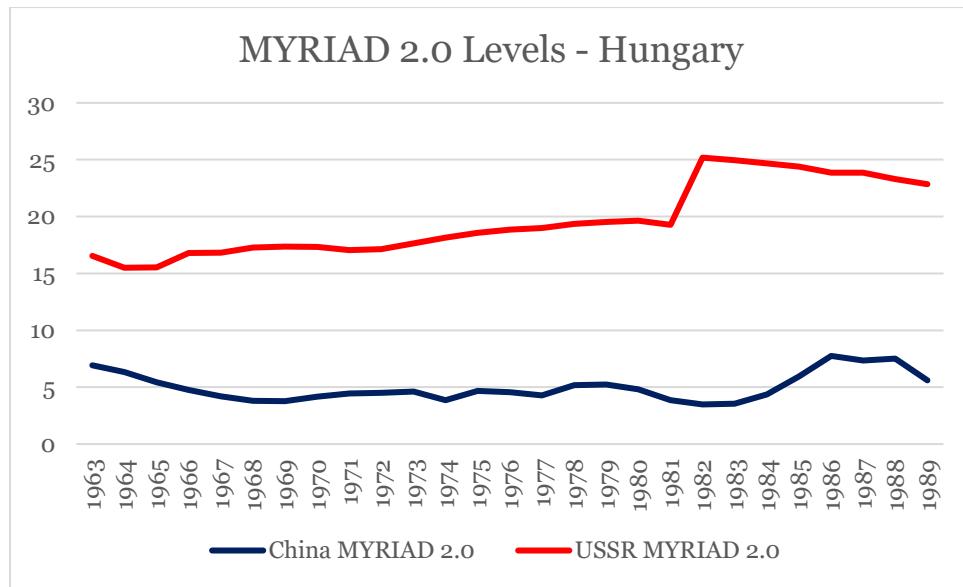
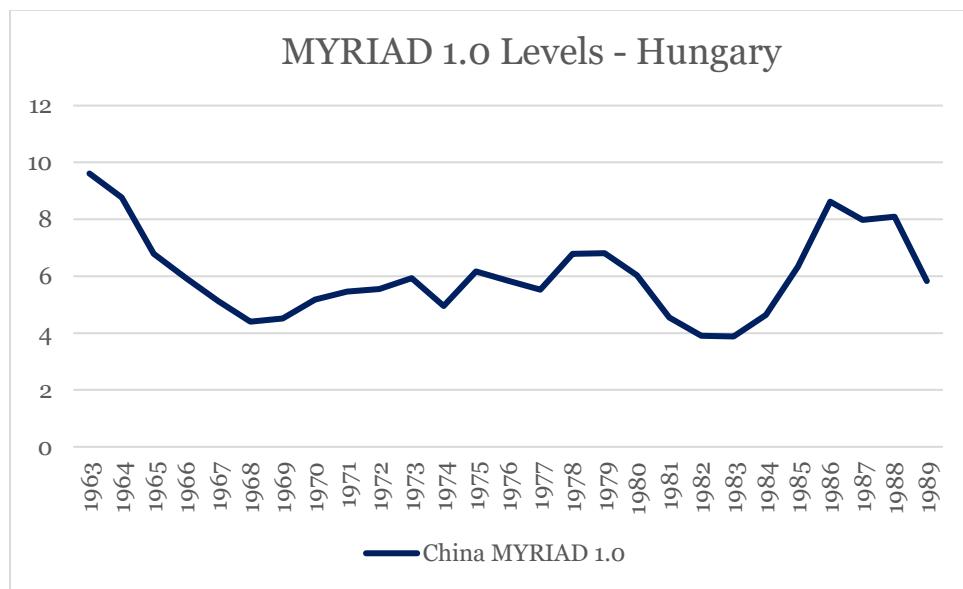
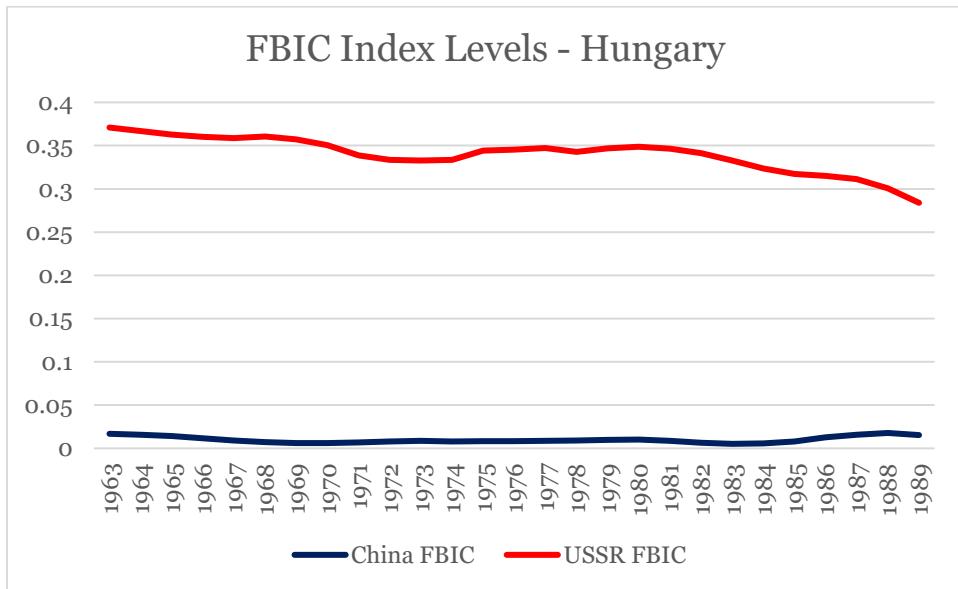
Hungary

The Hungarian People's Republic was formed in 1949 as a single-party communist state after a brief interregnum of Soviet occupation at the conclusion of World War II. The Hungarian communists had been organized in Moscow during the war and followed the advancing Red Army into Eastern Europe to enact their Soviet-influenced plan to seize the government. After a particularly brutal campaign of repression by the communist Minister of Interior in the post-war coalition government, the non-communist political forces in Hungary were purged from power and the Hungarian Communist Party seized total control of the regime. A Stalinist process pursued by Hungarian party leader Matyas Rakosi made the state a communist dictatorship that was militarily and economically backed by the Soviet Union. Only in 1956, during the aborted Hungarian Revolution, was there any threat of the communists losing power. This movement was put to an end when Soviet tanks rolled into Budapest and violently repressed the rioters. The short-lived reform communist government was purged and another pro-Moscow hardliner was installed: Janos Kadar. Kadar emerged as a staunch advocate of Moscow's domination when the Sino-Soviet Split emerged in the 1960s and publicly denounced Beijing's efforts to challenge the Soviets for leadership of the communist bloc. This policy continued until the Hungarian regime eventually fell in 1989. The historical details outlined indicate that the indices should display substantial Soviet influence level within Hungary throughout the Sino-Soviet Split period, reflecting their active support for Moscow over Beijing in the conflict.

The FBIC Index and MYRIAD 2.0 have maximum temporal coverage for China and the Soviet Union's influence in Cuba during this period, while MYRIAD 1.0 only produces full measurements for China. FBIC and MYRIAD 2.0 comparatively show a generally substantive influence advantage for the Soviet Union over China throughout the entire sample period, although directions of change over time are opposite. The disparity of the scale of their influence is also notable, with the FBIC separation being far larger than MYRIAD 2.0 appears to be. There is little historical context for the somewhat closeness of China and the USSR in 1964, as that was during the aftermath of the Hungarian Revolution when Moscow had a military occupation in Hungary and had installed a handpicked leadership. It is highly unlikely that this close to 11 unit difference is accurate, especially compared to the much wide 0.35 unit separation on the FBIC scale, which is much more substantive. Lacking Soviet levels for the MYRIAD 1.0 and considering the historical context, it is much more likely that the FBIC Index has better measurements of the comparative influence of China and the USSR in this case.

Directionality and shifts in growth for each state in Hungary also differ between indices. Chinese influence levels to scale remain fairly minimal across the indices, although MYRIAD 1.0's fluctuations are starkly different from the smooth transitions seen in the FBIC and MYRIAD 2.0 trends. The FBIC and MYRIAD 2.0 display marginal Chinese influence levels that ebb and flow slightly over time, with a slight increase in the late-1980s. MYRIAD 1.0 is more volatile, showing sharp dips up and down in the late 1960s and early 1980s that do not correspond with any major changes in Hungarian politics at the time regarding their relationship with China. Soviet influence levels also differ, but mainly in directionality between the two indices where their measurements are available. The FBIC Index's measurement of Soviet influence gradually trends downward, from a likely high in 1957 right after the military occupation following the Hungarian Revolution. As the Soviets disengaged and shifted to other conflict zones, it corresponded with a high but slightly decreasing level of influence until the end of the period in 1989. MYRIAD 2.0 disagrees with this, displaying a gradually increasing level of Soviet influence until a massive jump in 1982. This rapid shift does not appear to correspond with anything major in relations between the two states, making it unusual and not indicative of any historical moment. The MYRIAD 2.0 levels of the Soviet Union end in a slight decline, but only after close to 20 years of growth during a period when their engagement was actually reduced.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to show general differential levels for Chinese and Soviet influence in Hungary during the period of the Sino-Soviet Split. FBIC and MYRIAD 2.0 appear to agree about the substantial advantage the Soviet Union enjoyed in influence compared to China in Hungary, which supports our hypothesis concerning their loud support for Moscow's leadership. There are some differences in directionality, particularly for the Soviet Union over time. It is more likely that the gradual negative slopes displayed by the FBIC Index is more historically accurate than the positive trends seen in MYRIAD 2.0's measurements. Chinese influence across the indices remains minimal as expected, although there are some shifts that are not consistent. We can conclude that all three indices of influence generally behave as we would expect, although the disparity and directionality of the FBIC Index appears more accurate in context.



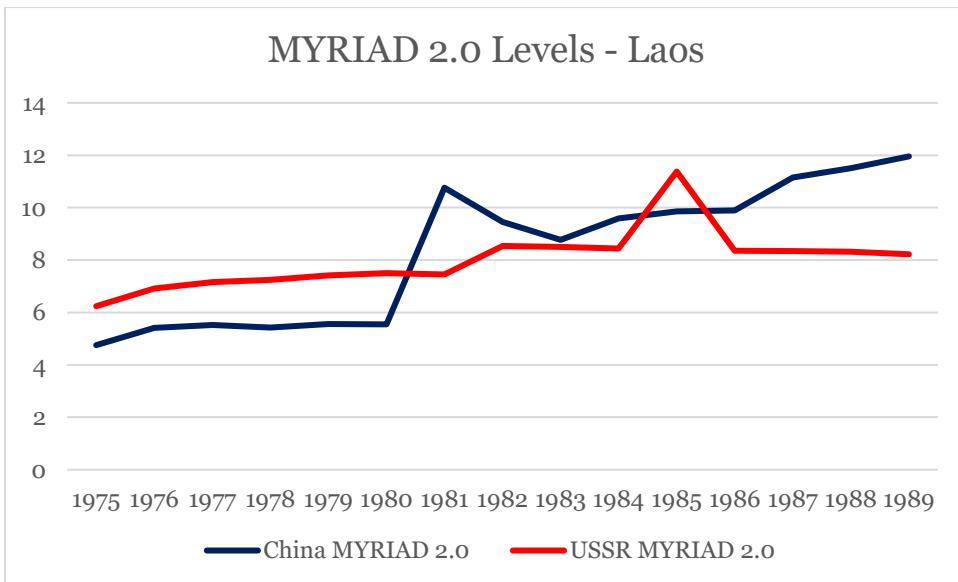
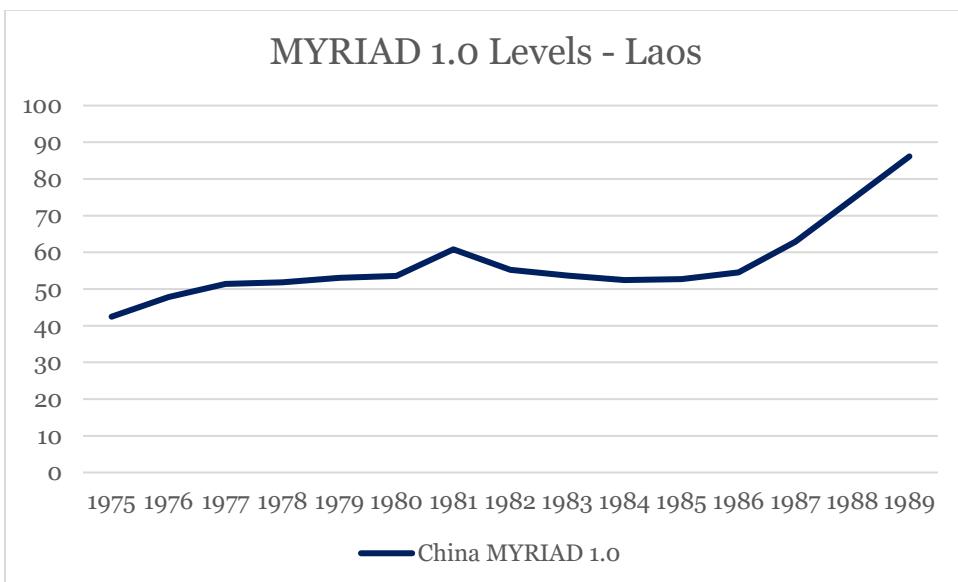
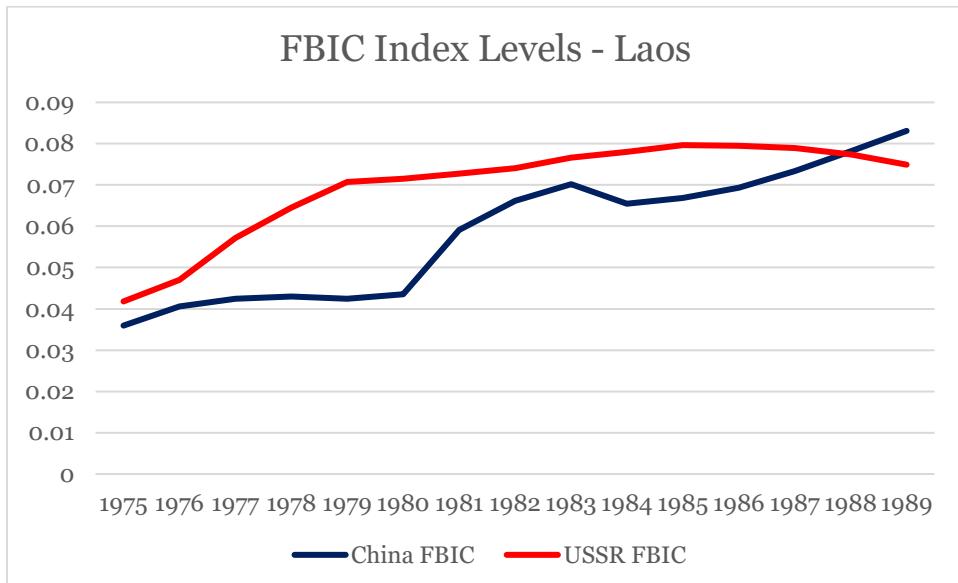
Laos

After the Lao People's Revolutionary Party seized control of Laos in 1975 with support from North Vietnam, the two parties began to exist in close cooperation with one another. Throughout the period, the LPRP functioned as a rump of the Communist Party of Vietnam, who had originally organized its creation. Although they never explicitly declared a side in the Sino-Soviet Split, after Vietnam sided with the Soviets following the end of the Vietnam War, it was understood that Laos would be joining them in their allegiance to Moscow. Laos remained in the Soviet camp implicitly throughout the 1970s and into the 1980s. Only in 1988 did they have a public dispute with the Kremlin over opposition to Soviet leader Mikhail Gorbachev's push for the liberalizing reforms known as *glasnost* and *perestroika*. China was able to exploit this by acquiring more economic connections, but they were marginalized politically in the Laotian party by Vietnamese efforts. It is likely that both China and the Soviet Union will have relatively low levels of influence since Laos never explicitly chose a side in the Sino-Soviet Split. However, given the historical context there may be a slight Soviet advantage, indicated by their unspoken siding with Moscow by not coming out for Beijing.

There is maximum FBIC and MYRIAD 2.0 coverage for China and the Soviet Union in Laos during the Sino-Soviet Split sample years, while there is only full China coverage for MYRIAD 1.0. Comparative disparity between Chinese and Soviet influence appears to be consistent between the two available indices, with neither being substantially larger than the other. FBIC displays a 1 to 3 unit advantage for the USSR over China until an eventual lead switch in 1988, with China taking a close to 2 unit lead in 1989 only. MYRIAD 2.0's comparative levels are much more volatile, with China overtaking the Soviet Union by a bit in 1981 and declining over the next three years. The Soviets take the lead by around 2 units in 1985 and then dip back below China again for the remainder of the period. China holds a sample high separation of around 4 units in 1989 with trends upward as the Soviets disengaged. Considering Laos kept China at a distance until the stakes were low in the late 1980s, it is unlikely that the Chinese advantage in the early 1980s was an actual reflection of the situation. It is more probably that the Soviets maintained the lead as shown in the FBIC Index until the 1988 separation that was noted in the historical overview and reflected in the measurements.

Chinese influence levels across the three indices appear to be in general growth over time. FBIC, MYRIAD 1.0, and MYRIAD 2.0 all measure a low point of Chinese influence over Laos in 1975 and conclude the sample range with a maximum level in 1989. There is an agreed upon increase in the early 1980s that reduces slightly before a larger elevation during the late 1980s. Generally, the only major disagreement between the three is the smoothness of these changes, with MYRIAD 2.0 seeming to be more sudden in its shifts than either FBIC or MYRIAD 1.0. MYRIAD 1.0's measurement of Chinese influence also takes a more notable inverse-U in the early-to-mid 1980s that is less gradual in FBIC and not seen in my MYRIAD 2.0. Soviet influence trends appear more substantive in the FBIC Index when compared to the more plateau general level in the MYRIAD 2.0. There is an agreed-upon increase until the mid-1980s, although the FBIC measurement to scale is larger. MYRIAD 2.0 depicts a sudden spike in 1985 that corrects the following year, which is not present in the FBIC Index. Both display a slight decline from 1988-89, as is expected considering Laos coming out against Gorbachev's reforms and the reduction of Soviet involvement abroad.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 have a number of disagreements in the case of Laos' alignment during the Sino-Soviet Split that do not agree with the historical analysis. The early years of higher Soviet influence displayed in the FBIC and MYRIAD 2.0 seems comparable, but the rapid rise of China in the later does not have much historical precedent from which to confirm these shifts. It is more likely that the FBIC's gradual increase and then decrease to lost lead position to China in the end of the period is accurate. Although we have no Soviet measurements in MYRIAD 1.0 to use, their Chinese influence levels appear to be valid and are less volatile than MYRIAD 2.0. We can conclude that the narrow separation of influence with the Soviet Union maintaining a slight advantage for much of the era confirms our hypothesis about their tacit support for Moscow in the Sino-Soviet Split.



Mongolia

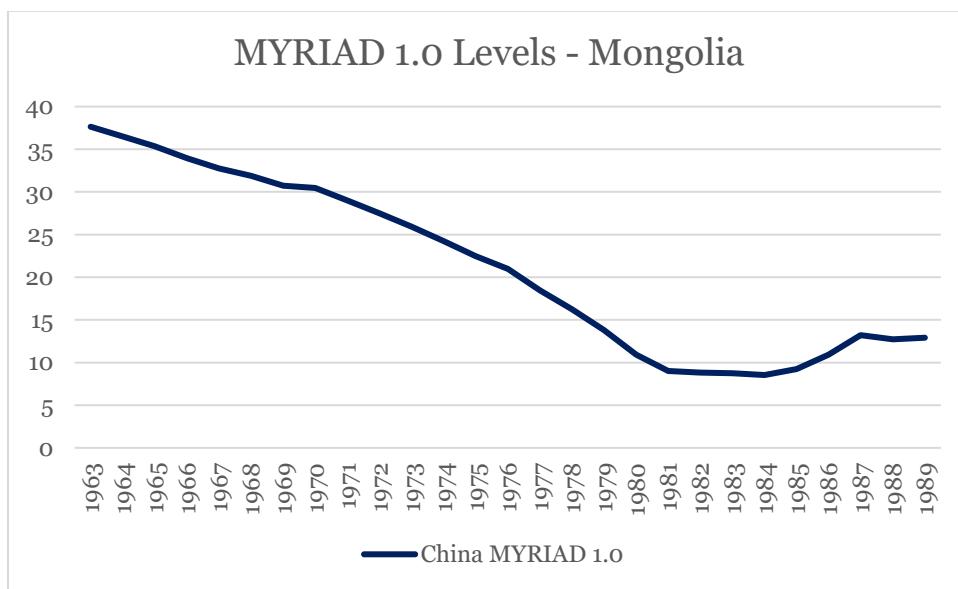
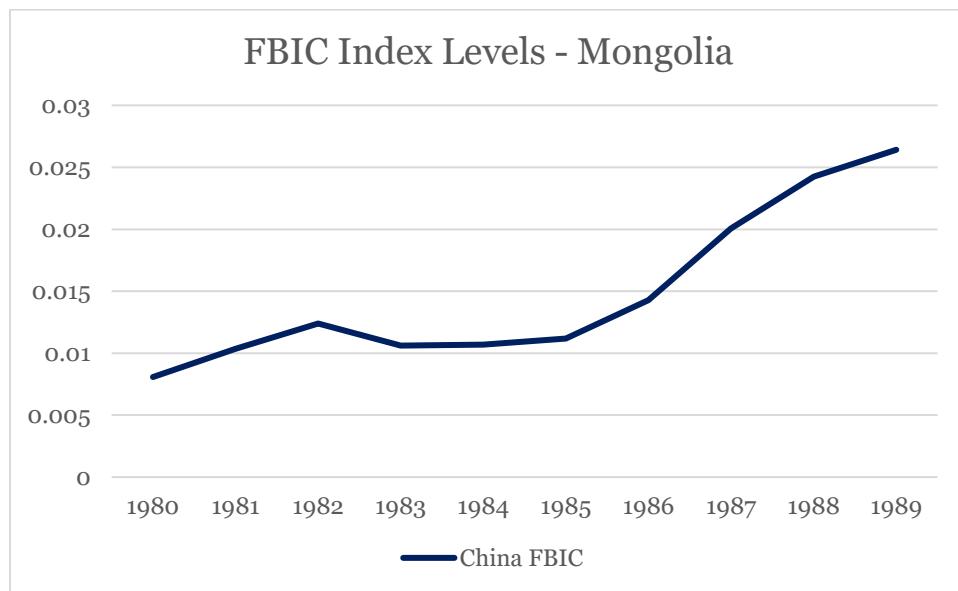
Mongolian communists, with military support from the Soviet Union, launched a successful revolution in 1921 to oust both the Republic of China and tsarist White Russian forces from the territory. Following their success military campaign, the Mongolian People's Party established the second Marxist-Leninist state regime in the world. From that point on, their party was closely linked with the CPSU and it was accepted on both sides that Mongolia was de facto the unofficial sixteenth Soviet republic. Most of the Mongolian communist leadership had been trained or educated in the Soviet Union and it was economically reliant on Soviet trade. This loyalty continued into the Sino-Soviet Split, which was a particularly concerning event to Mongolia due to historical disputes with China over territory they feared Mao might press. Their reliance on the USSR as protection from a Chinese invasion made Mongolia extremely receptive to Soviet influence and they were a vocal supporter of the Soviet Union as the dominant world communist power. China attempted to gain inroads into the Mongolian party after Stalin's death, but the pro-Soviet leader initiated a successful purge of supposed "Chinese elements" within his party and put an end to that effort. This loyalty and stalwart support for the USSR continued until the end of the Cold War. Given the historical circumstances, we believe that Mongolia's vocal support for the Soviet Union during this period will be reflected by substantially higher Soviet influence across the indices compared to that of China.

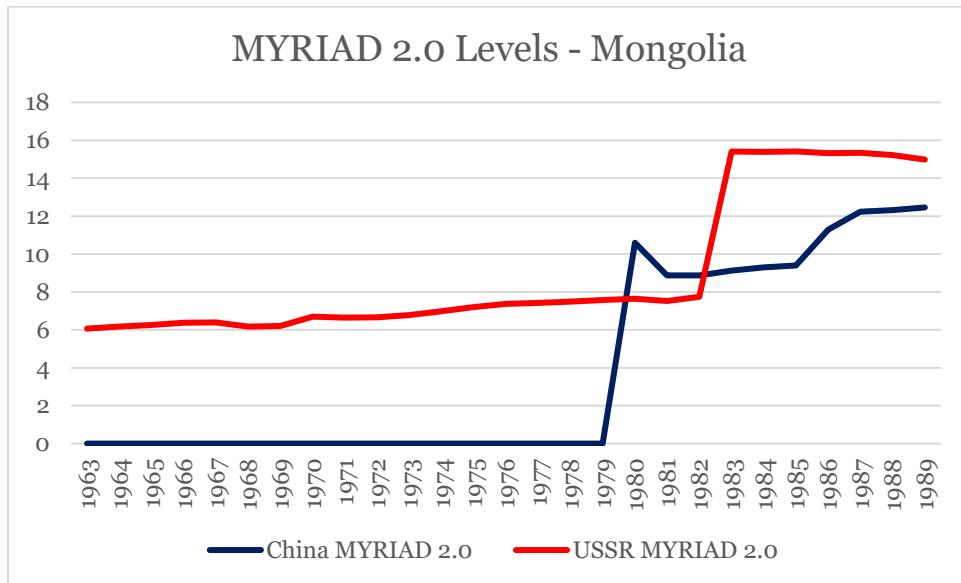
Unfortunately, only MYRIAD 2.0 has full coverage for China and the Soviet Union's influence in Mongolia during the period of the Sino-Soviet Split, making our analysis fairly limited in this case. Comparative Chinese and Soviet influence levels in the MYRIAD 2.0 also appear a bit suspect. Soviet levels do appear higher than China, as would be expected, but the separation between the two isn't as large as we would theoretically expect. Only a 6 unit difference between a state terrified of Chinese intervention and the entity that Mongolia considered itself an unofficial part of is quite striking and raises questions about the Soviet measurements for that index. The levels observed in MYRIAD 2.0 for the Soviet Union, the only of the three indices that produces these estimates, are also confusing on the subject of their directionality and trends. The low point of Soviet influence appears to be 1963, which is odd considering how tight a hold Stalin kept on Mongolia, which Khrushchev continued into the 1960s. There is a general increase until 1983, when a massive leap in Soviet influence occurs, coinciding with no historical event we are aware of in their mutual relations. The assertion made by the MYRIAD 2.0 index that Soviet influence over Mongolia was higher during Gorbachev's years in the mid-to-late 1980s than during the 1960s seems somewhat preposterous.

Chinese influence levels are available across all three indices, although full temporal coverage is only present for MYRIAD 1.0 and MYRIAD 2.0; the FBIC Index only covers 1980-89. MYRIAD 1.0 and MYRIAD 2.0 have very different trends for Chinese influence in Mongolia that do not align in directionality or degree. MYRIAD 1.0 displays a high level of Chinese influence in 1963, which declines steadily over time until the mid-1980s when it begins a small elevation. The trend seen here seems reasonable given the historical context, as Mongolia's proximity to China likely made for higher levels prior to the Sino-Soviet Split, after which it began to decline following the Mongolian party siding with the CPSU. MYRIAD 2.0 likely displays some sort of data error, as Chinese influence from 1963-79 is completely null. Considering the variables that go into the creation of this index, it is highly unlikely that these zero ratings are accurate. The massive leap in influence in 1980 could actually be the first year where there is accurate and complete data. The higher Chinese influence levels in the early 1980s compared to the Soviet Union are also suspect. The FBIC Index, with its more limited temporal coverage, appears to agree with the readings of MYRIAD 1.0 between the years 1980-89. There is a slight increase in Chinese influence throughout the decade, although examined to scale these gains are relatively small. However, the directionality and magnitude appear to be similar between the two and seem somewhat comparable to the post-1979 levels in the MYRIAD 2.0 index.

There is great variation between the FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 when examining their measurements of Chinese and Soviet influence in Mongolia during the period of the Sino-Soviet Split. The FBIC Index appears to accurately reflect the small, yet increasing level of Chinese influence in the 1980s despite a limited temporal range and lack of Soviet observations due to source data. MYRIAD 1.0 only produces Chinese measurements, but appears to accurately reflect the declining Chinese influence after the outbreak of the conflict, followed by the slight growth in the later years of the sample. MYRIAD 2.0 performs weakest when applied to the historical situation and our theoretical expectations. Chinese null influence for much of the temporal range and low Soviet influence levels should be revisited. Directionality for the Soviet

influence observations are also not in the direction that would be expected and the Chinese lead position in 1980 is an extreme outlier. We can conclude that although their range and coverage is more limited, the FBIC Index and MYRIAD 1.0 appear to confirm our expectations about Chinese influence, but do not allow us to make any conclusions about Soviet lead influence. However, it does not strain credulity to imagine that if available the Soviet output would appear substantially higher than the low levels of Chinese influence observed in both.





Mozambique

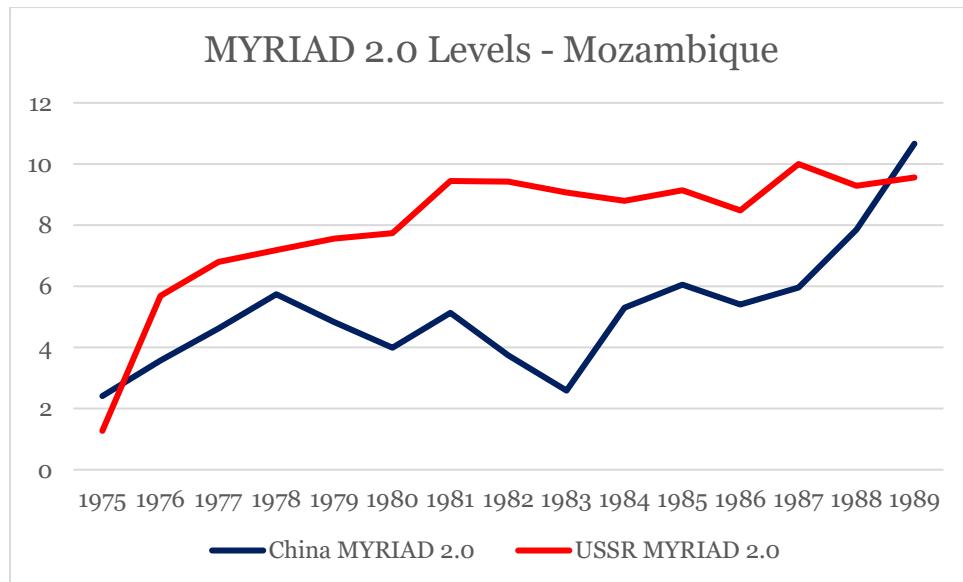
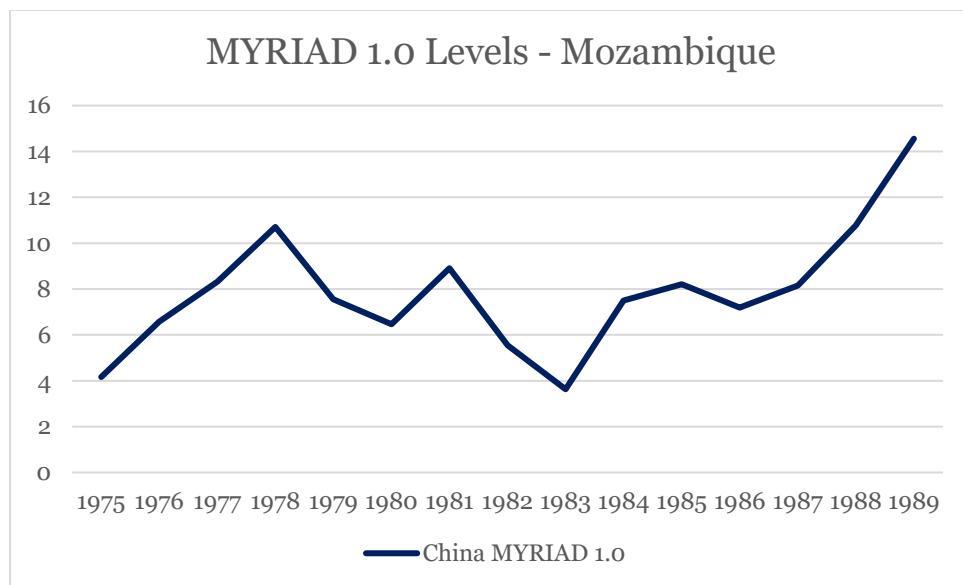
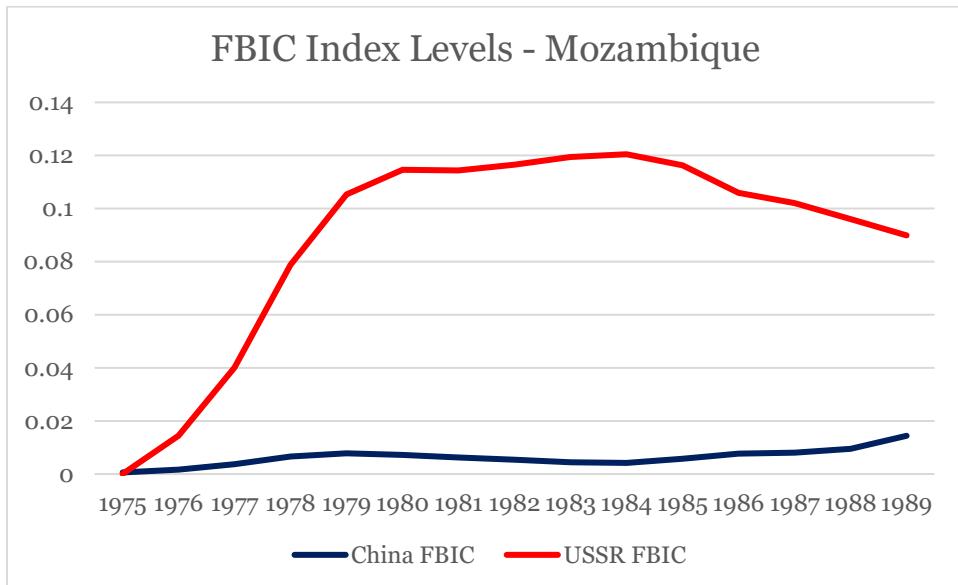
The People's Republic of Mozambique achieved independence in 1975 after a protracted national liberation struggle against their Portuguese colonial administrators. Almost immediately, the victorious Mozambique Liberation Front (FRELIMO) under the leadership of Samora Machel declared Mozambique to be a Marxist single-party state and oriented their international outlook toward the Soviet Union. In 1977, Mozambique signed a treaty of friendship and cooperation with the Soviet Union, signaling their allegiance to Moscow and creating a notable souring of relations with China as a result. It was also in this year that the Mozambique Civil War broke out between the FRELIMO government and anti-communist forces backed by neighboring Apartheid states Rhodesia and South Africa. This civil war would mark Mozambique's post-independence history throughout the Cold War, as it lasted officially until the Rome General Peace Accords were signed in 1992 and multiparty elections were held in 1994. However, the civil war became yet another internationalist conflict the Soviet Union and its allies became involved in, looking to keep the FRELIMO in power so Mozambique could eventually transition into a stable communist state. The Soviets and their ally East Germany provided military aid and technicians to the FRELIMO, later joined in their efforts by North Korea. Their engagement continued into the 1980s, but the FRELIMO was left isolated in their conflict when the split in 1989 and the Soviet Union broke up in 1991. The historical circumstances outlined above lead us to hypothesize that while the Soviet Union will maintain higher influence levels compared China, the lack of denouncing Beijing in favor of Moscow likely means that the levels of both are fairly limited in Mozambique during the period of the Sino-Soviet Split.

There is maximum temporal coverage for China and the Soviet Union in Mozambique within the FBIC Index and MYRIAD 2.0, while MYRIAD 1.0 only produces complete output for China during the period of the Sino-Soviet Split. The comparative levels between China and the USSR appear to meet our general expectations, with the Soviets maintaining their influence advantage over the Chinese throughout the temporal sample. What is notable about the influence gap between the two is that the magnitude of it is much greater in the FBIC Index than MYRIAD 2.0. The FBIC displays a general low parity between them in 1975, while China has a close to 2 unit advantage in the same year according to MYRIAD 2.0, which disappears the following year. Throughout the late 1970s until the mid-1980s, Soviet influence widens compared to Chinese in the FBIC while the separation is much more narrow and marginal in scale within the MYRIAD 2.0 index. The gap in FBIC becomes smaller in the late 1980s but is nowhere approaching parity. MYRIAD 2.0 output shows that the Chinese actually overtake the USSR by 1989 in striking contrast to the other index. There are major differences in the comparative levels between the two indices where Soviet measurements are available. The striking magnitude of FBIC Soviet influence in the 1980s would theoretically lead to them vocally siding with the USSR, but as we've noted that was not the case. The observation of Chinese levels in MYRIAD 2.0 approaching and even overtaking the

Soviet Union is more unlikely, considering they were relatively uninvolved with the FRELIMO, especially compared to the Soviets.

Chinese influence levels are available across the three indices at the maximum temporal range to be analyzed for trends and directionality. The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all show Chinese influence at consistently low levels with a general upward directionality. However, the sudden increases and decreases observed in MYRIAD 1.0 and MYRIAD 2.0 are not present in FBIC, which shows a more gradual ebb and flow during the 1980s. All three observe a more substantial growth of Chinese influence in Mozambique in the late 1980s that is likely accurate, with China engaging to fill the void left by the withdrawal of the Soviet Union. Peaks and valleys across the indices appear to be comparable, although the magnitude and suddenness of these changes vary. Soviet influence measurements are only available for FBIC and MYRIAD 2.0, but present very different interpretations of the historical situation. The Soviet level of influence is consistently low across both indices in the introductory year, but makes massive increases into the late 1970s. However, to scale the growth of the FBIC is of a much greater magnitude than that of MYRIAD 2.0, which is much more conservative. Both display a plateau in the early 1980s, but have differing directionality in the later years. The FBIC Index observes Soviet influence entering a period of decline starting in 1985, which appropriately corresponds with Gorbachev's rise to power and policy of international disengagement. The MYRIAD 2.0 index shows the opposite, with Soviet influence in Mozambique growing during the same years, which does not uphold our understanding of Soviet foreign policy during that era.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 present on very different depictions of Chinese and Soviet influence in Mozambique during the Sino-Soviet Split. FBIC output displays a large growth of Soviet influence that outpaces China by a substantial amount for the entire temporal period. This large disparity was not predicted in our theoretical expectations based on the historical circumstances, as this condition should have led to vocal support for Moscow against Beijing, which FRELIMO largely refrained from doing. It is likely that the disparity seen in FBIC is accurate, but the condition of Mozambique's civil war may have been a greater influence on their decision to not become involved in the Sino-Soviet Split, despite the USSR's high level of influence. This could provide an explanation for the accuracy of the FBIC Index's trends and influence gap, but falls as an outlier within our hypotheses. MYRIAD 1.0 lacks Soviet measurements, but the Chinese levels available appear to cohere with the other indices. Chinese influence grows over time as the Soviets historically disengaged, but remained low throughout the period. MYRIAD 2.0 presents a volatile picture of comparative influence within Mozambique, with early and late Chinese advantages compared to the Soviet Union that strain credulity. The gap of influence to scale may be accurate according to the historical context, but it is highly unlikely that the Chinese measurements are reflective of the situational reality. We can conclude that the trends, directionality, and magnitudes presented in FBIC and MYRIAD 1.0 are likely more accurate within the case of Mozambique than MYRIAD 2.0. Although none present evidence that explain their position in the Sino-Soviet Split, the civil war context likely accounts for their decision to remain passive despite Soviet dominance.



Poland

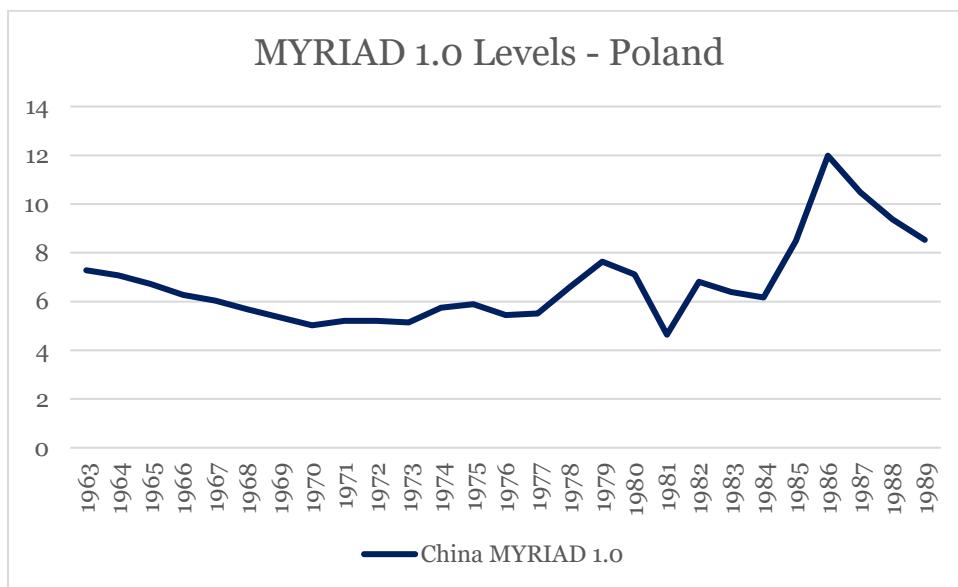
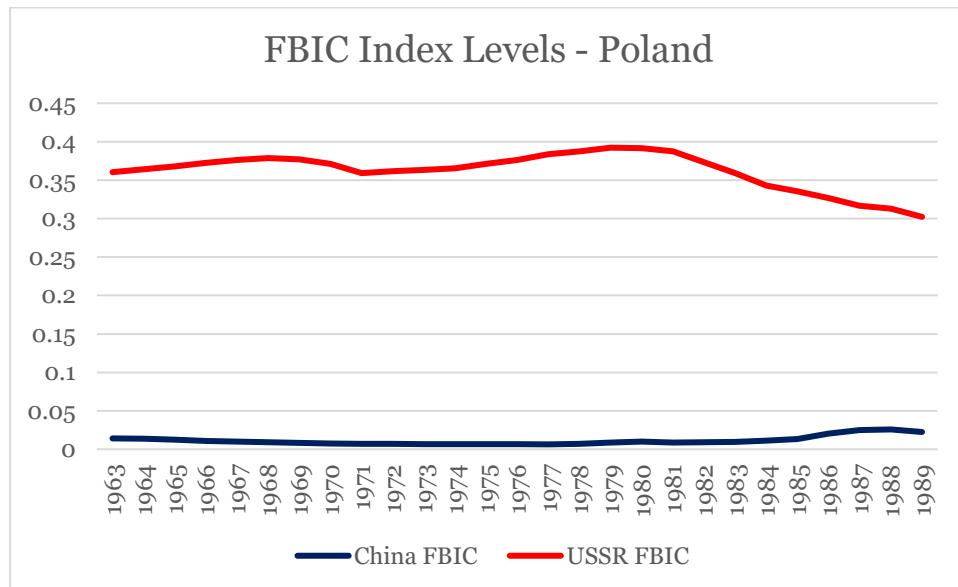
The communist-controlled Polish People's Republic was established in 1947 with support from the Soviet Red Army, which had occupied Poland in their advance to defeat Nazi Germany. Polish communists in wartime exile had organized to ensure their political domination when they returned to post-war Poland, with support from the USSR. After a 1946 referendum of questionable integrity, the government of Poland was restructured and the Polish Socialist Party under Wladyslaw Gomulka took control of the regime. Although the nominally pro-Soviet Gomulka was ousted shortly after by more hardline Boleslaw Bierut, the communists continued their takeover of Poland and were successful in maintaining control with the aid of the occupying Red Army. Soviet economic and military assistance brought the two states into close relations and Poland eventually became their military ally through participation in the Warsaw Pact. Throughout a number of leadership changes, including the return of Gomulka to power in 1956, the reorganized Polish United Workers' Party (PZPR) remained loyal to Moscow. When the Sino-Soviet Split erupted in 1960, Poland maintained this subservience to the USSR and backed their retribution against Beijing. After an intra-party coup brought hardline General Wojciech Jaruzelski into power and martial law was declared, the dogmatism of the PZPR eventually eclipsed even the Soviet party. However, the Soviet Union's involvement in Afghanistan and Jaruzelski's later opposition to the reformist line of Mikhail Gorbachev led to a short period of worsening relations before the eventual collapse of the Polish regime. Despite this, throughout the period of the Sino-Soviet Split the Polish party remained a vocal backer of the Soviet Union against China. The historical context suggests that we should observe substantially higher Soviet influence compared to Chinese throughout the period of the ideological conflict.

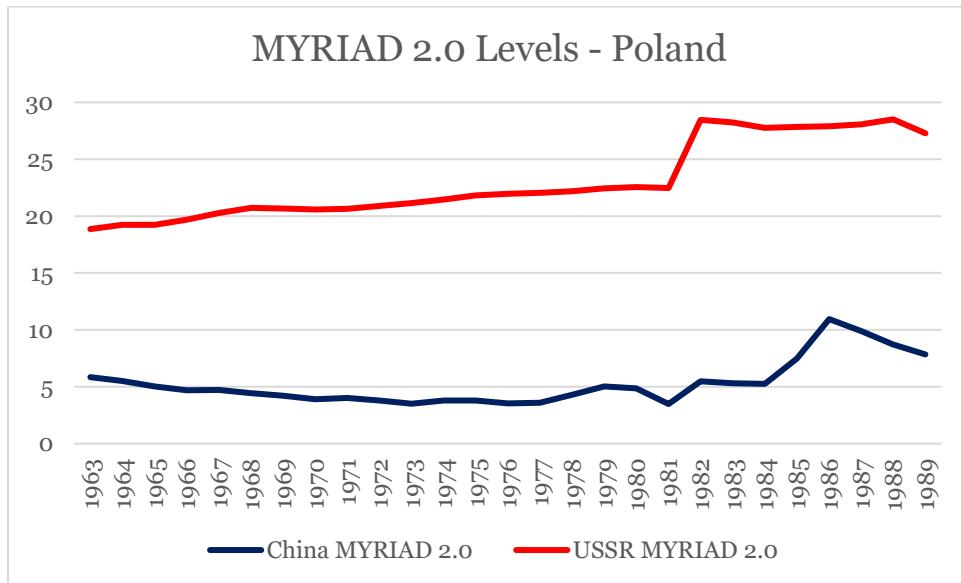
There is maximum coverage for Chinese and Soviet influence in Poland during the temporal period of the Sino-Soviet Split within the FBIC Index and MYRIAD 2.0. MYRIAD 1.0 only presents measurements of Chinese influence, although it is for the entire year range. As expected given the relationship between the Soviet Union and Poland, FBIC and MYRIAD 2.0 depict a large influence disparity between them and China for the whole sample. The FBIC Index presents a substantial influence separation between the two states in Poland that only begins to narrow somewhat during the mid-1980s, when the Soviets were starting to disengage. Despite this reduction in the separation, they never reach any levels approaching parity and the clear lead influencer is always the Soviet Union. MYRIAD 2.0 also displays a large influence advantage for the Soviet Union, although the separation is not as substantial as in the FBIC Index. The 13 unit separation in 1963 between the two states is as close as they ever approach to one another, but to scale this gap is not as significant. The separation observed in both indices are reflective of the historical situation, with the Soviets maintaining a lead over China for the period. However, it is probable that the large disparity observed by the FBIC Index is more accurate at comparing the Chinese and Soviet influence levels during this period.

Chinese influence levels have full coverage across the three indices, allowing for comparison of their directionality and magnitude levels. All of them appear to produce similar trends over time, with a slight marginal decline of Chinese influence in Poland during the 1970s followed by a larger increase in the mid-1980s. The suddenness of this late growth differs between the indices, with MYRIAD 1.0's changes in 1981 and 1986 in particular being larger than the measurements of the other two. The low magnitude of their influence when examined within the particular scales of the indices likely makes these peaks appear more dramatic than they really are. The gradual changes observed in FBIC and MYRIAD 2.0 observations of Chinese influence over time are likely more reflective of the growth over time. Soviet shifts in influence between FBIC and MYRIAD 2.0 show more disagreement than the Chinese trends. There is a high level that plateaus in FBIC, before entering a period of somewhat substantive decline between the years 1981-89. Compare this to the MYRIAD 2.0 measurements, which show the Soviet Union actually growing their influence in Poland in the 1980s, especially in 1982 when there is a large increase that is maintained until 1989. The growth in 1981, corresponding with Jaruzelski's assumption of power in Poland, is reflected also in the FBIC Index. However, it is much less significant and is followed by a continuous downturn. The increases between the years 1985-88 in MYRIAD 2.0 are not likely reflective of the historical reality, as that was during the Gorbachev reform period, which conflicted with Jaruzelski's hardline position.

The FBIC Index and MYRIAD 2.0 do show agreement about a substantial Soviet advantage in influence over Poland compared to China, with MYRIAD 1.0 presenting support about the marginal Chinese levels that are observed in the other two indices. All three agree that Chinese influence remains low throughout the period, but increases to a small degree

toward the end of the 1980s. Soviet output is the main contention point between the two indices where it is available, with FBIC presenting a much greater magnitude than is generated in MYRIAD 2. There is also disagreement about the directionality of Soviet influence in the mid-to-late 1980s. It is likely that the FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 generally reflect the historical influence of China in Poland. The FBIC Index's high comparative Soviet levels are probably more accurate than the narrower differential in MYRIAD 2.0. We can conclude that our hypothesis about substantial Soviet influence being reflected in the vocally pro-CPSU regime of Poland during the Sino-Soviet Split.





Romania

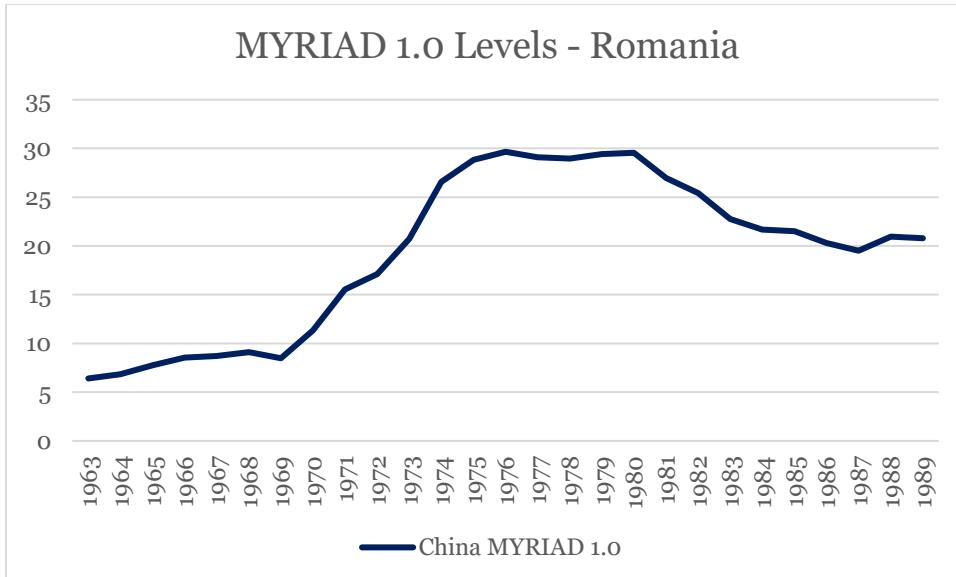
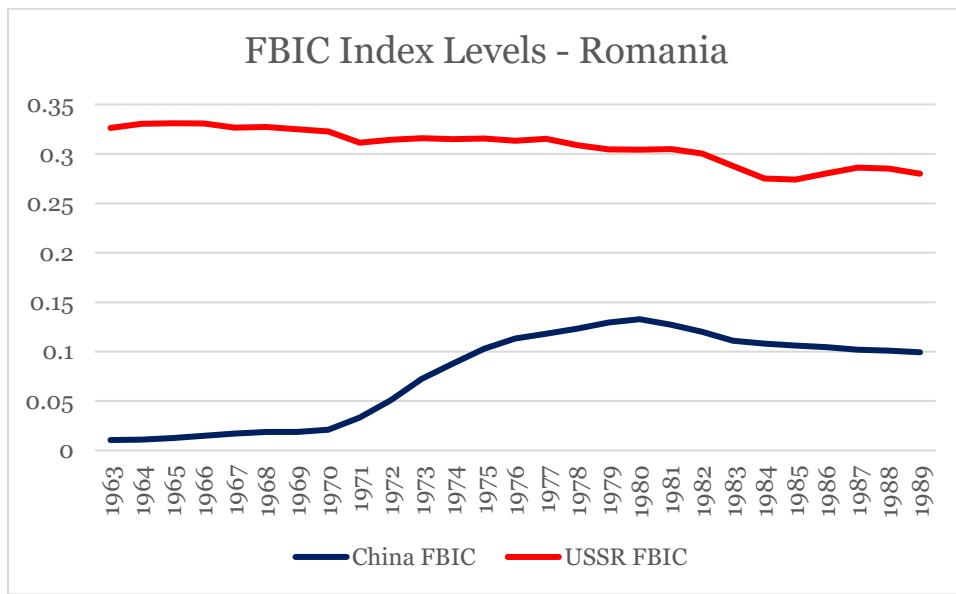
After the conclusion of the Second World War, Romania was occupied by the Soviet Red Army and a native communist movement slowly took control of the post-war government. Gheorghie Gheorgiu-Dej, leader of the Communist Party of Romania, became the de facto dictator of Romania with the help of Soviet military and economic backing. Although he had an initial power struggle with a “pro-Moscow” faction of his own party (compared to his “native” faction), Gheorghiu-Dej emerged triumphant and never backed away from his party’s strong relationship with the Soviets. Strong political, military, and economic ties developed between the two states and eventually a military alliance was entered into through the Warsaw Pact. Although Romania’s refusal to participate in the Warsaw Pact’s 1968 invasion of Czechoslovakia led to a foreign policy rift with the Soviet Union, they remained allies and fraternal parties. China did attempt to make overtures to the Romanian leadership following the events of 1968, but Romania never rebuked the Soviet Union in favor of Chinese leadership. Trade in particular became a powerful inroad for China and Romania saw the Chinese rapprochement as a means by which to counter-balance any Soviet aggression. However, despite this improvement in relations, Romania never formally declared for Beijing. They utilized the Sino-Soviet Split as a means to gain concessions from Moscow rather than taking the hardline position seen in Albania. The historical context suggests that we should observe a larger Soviet influence advantage during the early period, followed by an increase in Chinese influence during the 1970s. However, their levels will not approach parity since Romania never came out against Moscow in favor of Beijing.

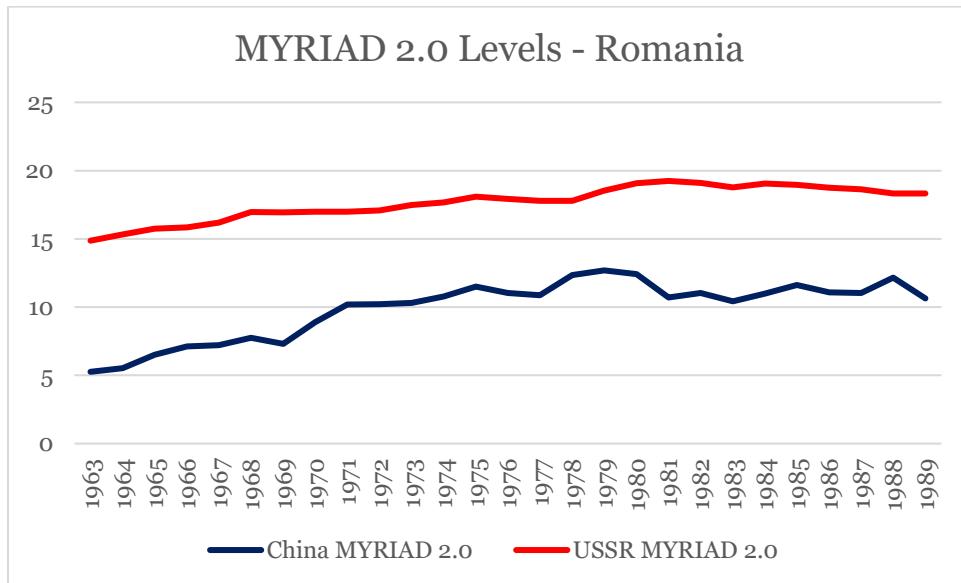
There is maximum temporal coverage for Chinese and Soviet influence in Romania during the period of the Sino-Soviet Split for the FBIC Index and MYRIAD 2.0, with MYRIAD 1.0 only generating Chinese observations. Examinations of the comparative differences in influence levels between the two states reveal some stark contrasts between FBIC and MYRIAD 2.0. As would be expected, the Soviet Union does maintain an advantage throughout the temporal range, although this gap appears much narrower in MYRIAD 2.0. The early FBIC separation is stark, more than 0.3 units of difference, which reduces by a bit as China makes inroads with Ceausescu’s regime in the 1970s. However, MYRIAD 2.0’s levels remain fairly stable with a difference of between 5-10 units, never separating or closing in substantively. It is highly unlikely that the Chinese levels in MYRIAD 2.0 that remain consistently proximate to Soviet influence, particularly in the early 1960s, are reflective of the historical situation. It is probable that the FBIC Index’s early substantive gap followed by a reduction in separation in the 1970s is more accurate.

Chinese influence levels across the three indices appear to be fairly similar. There is a low level of influence in Romania during the 1960s, followed by a modest increase throughout the 1970s, before taking an eventual decline in the 1980s. The dates of these shifts across the indices are surprisingly consistent. The most noticeable difference is the magnitude of the growth in the MYRIAD 1.0 output for Chinese influence, although that is likely a scaling issue that would look less suspect if put into a comparative context within its own index. The commonality across indices in the case of China is striking and perhaps the most similar we’ve observed so far. Soviet influence trends show disagreement on directionality between the

FBIC Index and MYRIAD 2.0. The FBIC Index displays a large but gradually declining level of Soviet influence in Romania that ends in 1989 at a low point, although this minimum value is still relatively high on the index's scale. MYRIAD 2.0 depicts the opposite, with Soviet influence increasing gradually over time and ending much higher in 1989 than it initially was in 1963. Given the gradual withdrawal of Romania from its closeness to the Soviet Union after the Prague Spring in 1968, the FBIC trend downward is likely more accurate than the growth shown in MYRIAD 2.0.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all seem to agree about the increasing Chinese influence in Romania during the 1970s that is a consequence of the Prague Spring. However, Soviet influence trends and magnitudes generate discrepancies between two of the indices. The separation between Chinese and Soviet influence in Romania is relatively small in MYRIAD 2.0, compared with the wide advantage enjoyed by the USSR depicted in the FBIC Index. Also, the FBIC shows a gradual decline of Soviet influence while MYRIAD 2.0 shows growth. It is likely that the magnitude and directionality of Soviet influence in Romania presented by the FBIC Index is more accurate, considering the foreign backlash Romania escalated against the USSR in 1968 after decades of strong connections before that. Despite these differences, it appears that our hypothesis about substantive Soviet influence leading Romania to side with Moscow over Beijing is confirmed.





Somalia

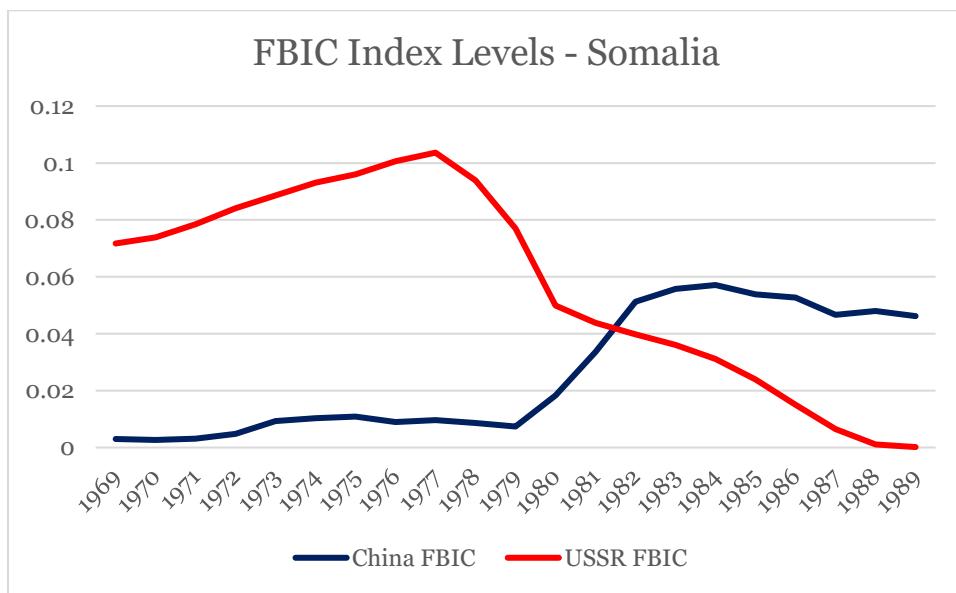
The Somali Democratic Republic was established as communist military dictatorship under the leadership of General Mohamed Siad Barre in 1969, following a coup d'état. Political parties were banned and the Somali constitution was suspended in favor of rule by Barre and his junta group known as the Supreme Revolutionary Council. Barre received initial support from the communist world, in particular the Soviet Union. Over time, Somalia's regime was organized more around a single-party Marxist state and Barre continued to receive greater amounts of trade and arms from the USSR. However, this all changed in 1977 when Barre launched an invasion of the fledgling communist regime in neighboring Ethiopia, seeking to annex the breakaway Ogaden region. The Soviets were displeased with Barre's attack because Ethiopia's government had just installed a new leader who appeared to be staunchly pro-Soviet. When Barre refused to back down and took control over both the Ogaden and much of the rest of Ethiopia, the Soviets sent technical aid and the Cubans military personnel to help with an Ethiopian counteroffensive. Barre was shocked because he had himself espoused friendship to the USSR, but when his offensive into Somalia was pushed back and a ceasefire declared, he denounced Moscow and made overtures to China. This was likely a move made out of spite rather than genuine affinity because at the same time Barre began courting support from the United States and others. However, his move had been made and China accepted Somalia's ideological support in a major win against Moscow. The historical circumstances highlighted here indicate that we should expect three different influence level trends within Somalia. First, the rise of Soviet levels as connections with Barre developed. Second will be the decline of Soviet levels as a result of their rejection of Barre during the Ogaden War. Finally, the rise of Chinese influence as they look to secure their hold on Somalia.

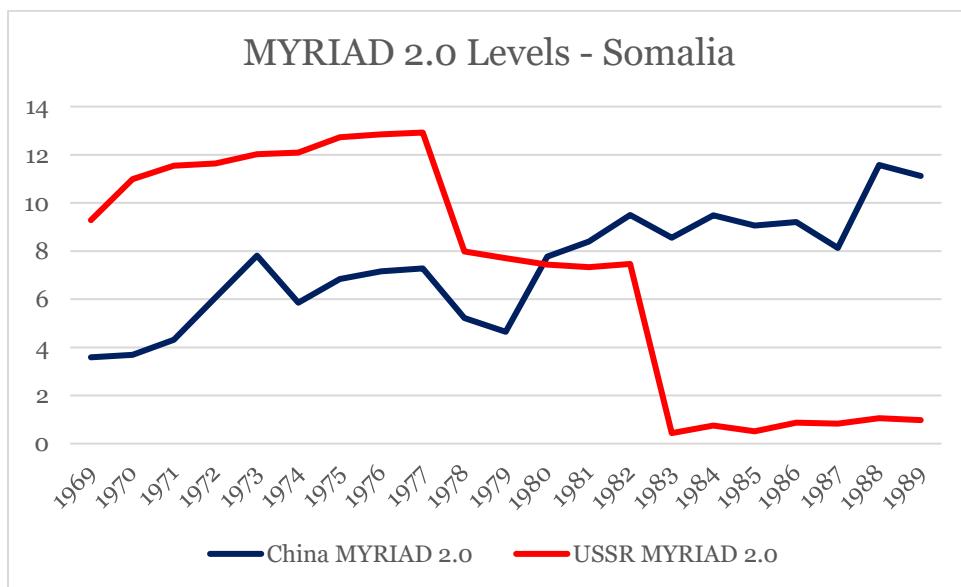
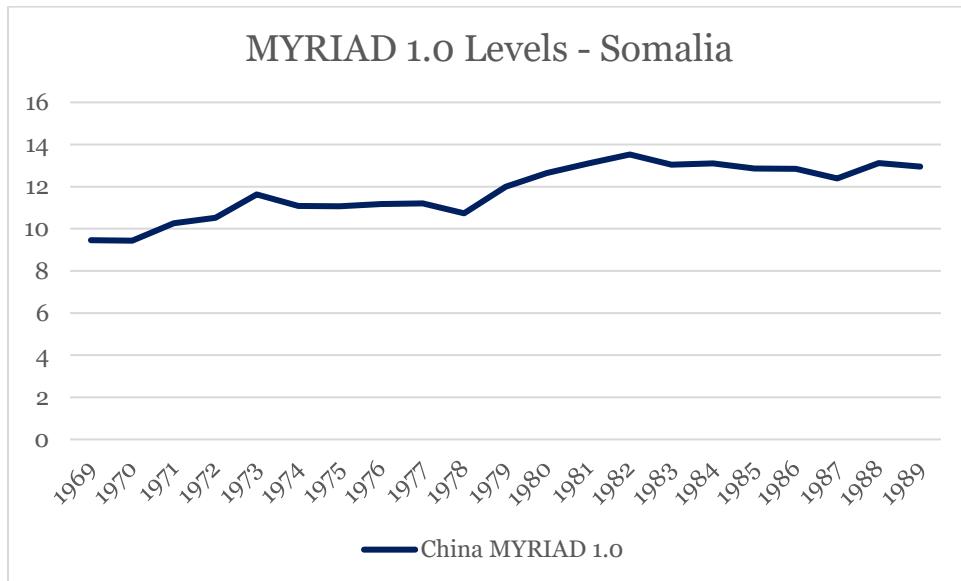
There is maximum influence coverage for China and the USSR in Somalia for FBIC and MYRIAD 2.0 throughout the temporal period; MYRIAD 1.0 produces only results for China. The comparative advantage gap appears generally similar across the FBIC and MYRIAD 2.0, although the shifts are generally smoother in the former. The early USSR advantage compared to China is consistent with the historical context and seen across both indices. The Chinese advantage that came from Soviet disengagement with Somalia differs in the observed crossover year; FBIC observed in 1981 and MYRIAD 2.0 in 1980. Considering the lag of some variables in FBIC and the obvious trends in the correct direction, this is not a major issue, but bears noting. After 1981 there is a clear advantage for China in the early 1980s, which eventually declines after they realize that Siad Barre is orienting to the western states. The scale of the influence gap between the two states is fairly comparable, although the separation after China's ascendency appears narrower in FBIC due to the gradual reduction of Soviet influence compared to the rapid fall seen in MYRIAD 2.0.

Chinese influence levels appear to have similar directionality, although the magnitude and the degree of changes differs. FBIC displays a marginally increasing amount of Chinese influence until a steady growth period beginning in 1980, during the aftermath of the Ogaden War. China crosses over the USSR in 1982 and continues to grow for two more years, before taking a gradual decline from 1985-89. MYRIAD 1.0 presents a steady increase over time, although there is not much of a

discernable leap in Chinese influence after the Ogaden War. Even examined at scale, it is unusual that such a critical period in Chinese-Somali relations does not present a larger influence increase for the MYRIAD 1.0 index. MYRIAD 2.0 shows a positive trend in Chinese influence more similar to MYRIAD 1.0 than FBIC, which appears to overestimate the pre-1979 levels if examined in the historical context. However, it does reflect the large shift in Chinese influence after 1979, more similar to FBIC than MYRIAD 1.0. Soviet influence levels between FBIC and MYRIAD 2.0 present generally similar trends, although the magnitude of the post-1979 decline is more sudden in the later. Both estimate growth in Soviet influence over time, consistent with expectations. Then after the Ogaden War there is a sharp decline, although this drop is smoother and more gradual in the FBIC Index. MYRIAD 2.0 shows Soviet influence in Somalia falling off a cliff in 1983 followed by a flat line, while the FBIC results take the trend of a steady and strong downward slope.

The FBIC, MYRIAD 1.0, and MYRIAD 2.0 all appear to generally reflect the accurate trends in Chinese and Soviet influence in Somalia during the Sino-Soviet Split. FBIC and MYRIAD 2.0 accurately display the allegiance change following the Ogaden War more or less temporally correct. The magnitude of these shifts is the main contrast between the indices, with FBIC showing more consistent trends in the period after 1979, while MYRIAD 1.0 and MYRIAD 2.0 are more volatile in their measurements across the years. MYRIAD 1.0 also to scale does not appear to depict well the jump in Chinese influence after Siad Barre broke with Moscow, which does appear more dramatic in FBIC and MYRIAD 2.0. We can conclude that influence outputs for the FBIC Index and MYRIAD 2.0 support our hypotheses about Somali alignment during the Sino-Soviet Split and the shift between camps in 1979.





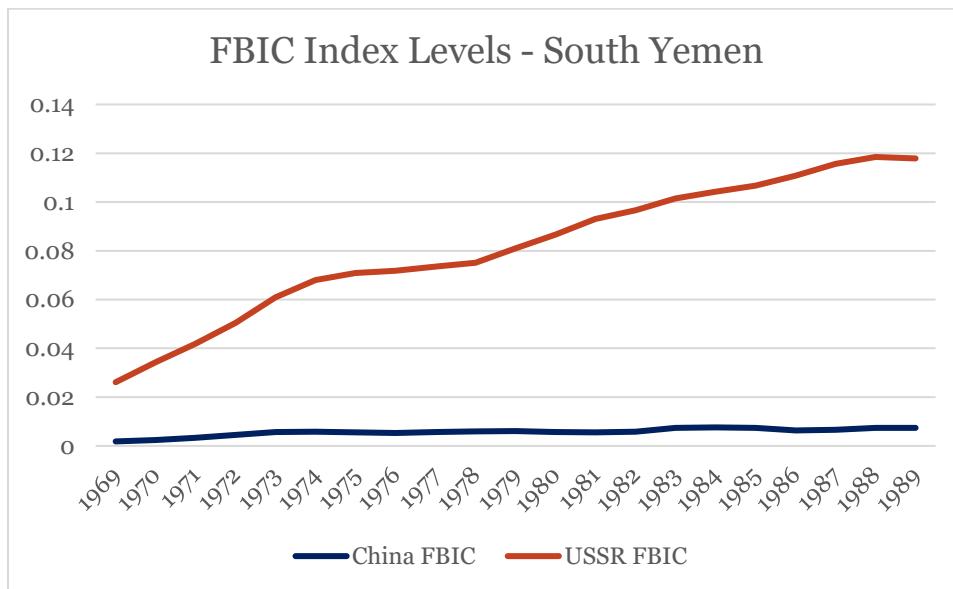
South Yemen

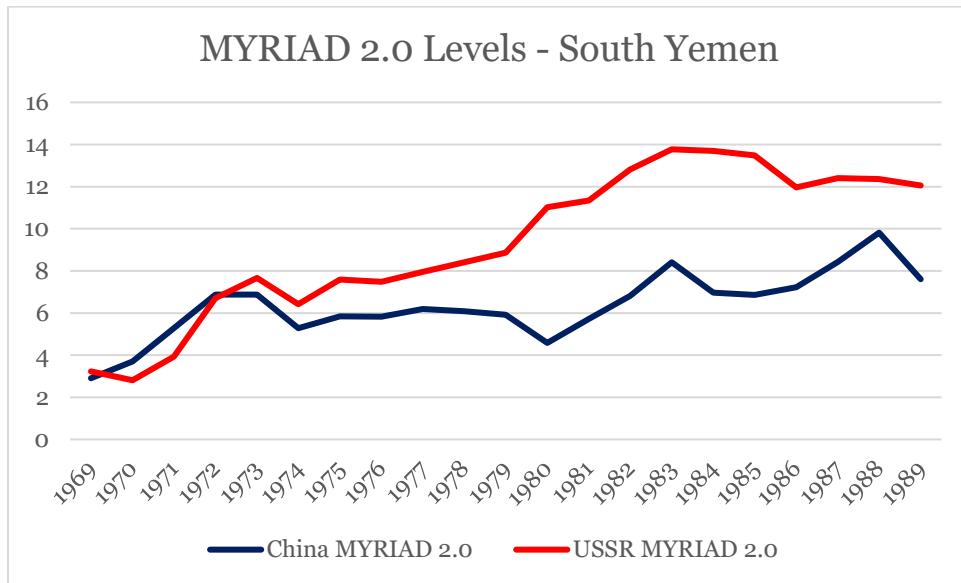
Following independence in 1967, South Yemen was controlled politically by the National Liberation Front, who ruled for several years as a political coalition. In 1969, the Marxist wing of the NLF gained control and the NLF was reorganized into the Yemeni Socialist Party. The YSP's ruling elites were hardline pro-Soviet communists, who had received ideological training and organizational assistance from the USSR. They established treaties with the USSR and began receiving economic and military assistance, in exchange for permitting the Soviet Navy access to their southern ports. Despite receiving some support from China, the YSP never made overtures to them as an alternative to the Soviet Union. When the Yemeni Civil War broke out with North Yemen in 1972, the Soviet Union and several of their allies lent military support to South Yemen, further bolstering the USSR's influence. Despite the presence of the Soviet Navy, Yemen never explicitly took a side in the Sino-Soviet Split. It was implicitly understood that they were part of the Moscow camp and their lack of backing Beijing supported this, but it is likely that they did not wish to get involved. Thus, they took the default position of implicit support without spoken alignment. The historical conditions lead me to hypothesize that the Soviet Union will maintain an influence lead over China in South Yemen throughout the period, but the levels are likely low in reflection of their assumed but unspoken position.

There is maximum FBIC Index and MYRIAD 2.0 coverage for China and the Soviet Union in South Yemen during the period of the Sino-Soviet Split. Unfortunately due to a lack of treaty index data, there is no coverage for either state within the MYRIAD 1.0 index. Thus, this section will only compare the output for the former two indices. The gap of influence between China and the Soviet Union comparatively between the FBIC Index and MYRIAD 2.0 has a general agreement about the lead state, but the separation is quite different. The FBIC disparity between Chinese and Soviet influence in South Yemen is substantial and increases over time. Although the early levels are somewhat small to scale, by 1989 the 0.12 unit separation generated from consistent Soviet influence growth creates a large influence advantage for Moscow. MYRIAD 2.0 presents a similar pattern of increasing Soviet influence advantage over China, but the separation is much narrower than in the previous index. There is no major disparity between the two states in South Yemen until 1980, although to scale the difference between the years 1980-89 is not as substantial as appears in the FBIC Index. Comparatively, the influence difference appears much more significant in FBIC than it does over time in MYRIAD 2.0.

The level output for China and the Soviet Union in terms of magnitude and directionality appear to differ greatly within South Yemen during this temporal period. Chinese influence in the FBIC Index remains marginal throughout the sample, although it does slightly increase over time. MYRIAD 2.0's China measurements appear to be moderate, especially compared to the Soviet Union levels. While the two do show increasing Chinese influence over time, the magnitude of their readings are vastly different. Soviet influence in the FBIC is rather small to begin with in 1969 when the communists took control of South Yemen, but grows substantially over time to reach a reasonably high 0.12 level by 1988. Compare this with MYRIAD 2.0's readings of Soviet influence, which also begin small but are more volatile in their growth rates and less powerful when applied to the index's scale. We can determine that directionality between the two indices for each state appear to be in agreement, but the rate of change and the levels of influence are in disagreement.

The FBIC Index and MYRIAD 2.0 appear to have somewhat similar output for China and the Soviet Union in South Yemen during the Sino-Soviet Split, although there are distinctions for all elements except directionality of influence trends. The general gap and magnitude of the states appear to support our hypothesis about South Yemen's passive support for Moscow in the conflict, considering the low levels for both in 1969 and the initial Soviet advantage. Both indices depict growth for China and the USSR in South Yemen throughout the temporal period, although the rates differ. The FBIC Index shows greater Soviet increases than MYRIAD 2.0, while the later shows larger Chinese growth during the 1980s. The separation between China and the Soviet Union is also in disagreement, with FBIC presenting a much more substantial advantage for the Soviet Union. MYRIAD 2.0 output shows the two states being neck-and-neck for much of the 1970s and only a moderate to scale advantage for the USSR in the 1980s. Considering the involvement of the Soviet Union in South Yemen, particularly their use of naval bases in the state, it is more likely that the FBIC Index depicts more accurate influence levels compared to MYRIAD 2.0.





Vietnam

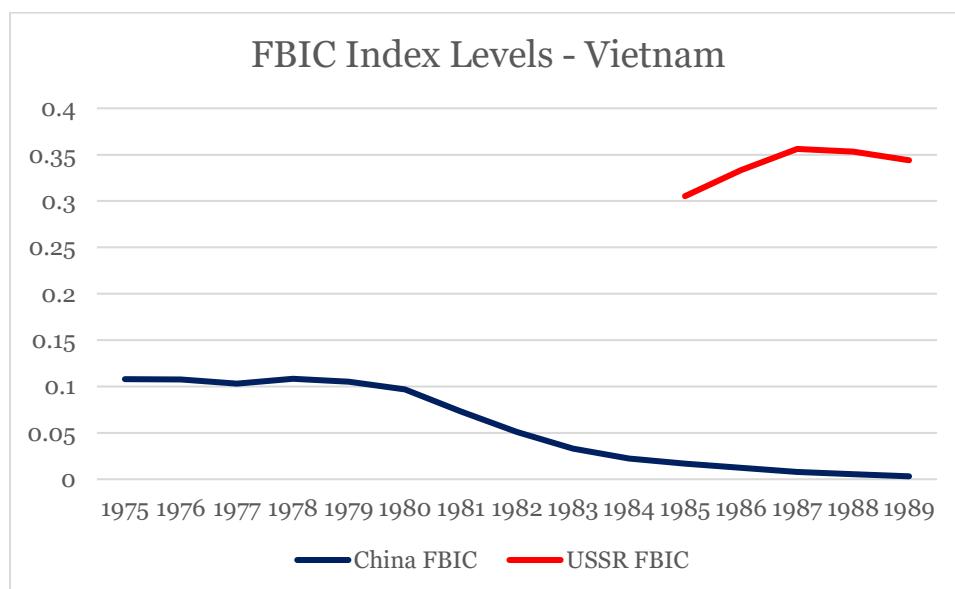
The Vietnamese communist movement achieved its first major victory in 1954 when they were able to come to terms with the French colonial administration in Indochina that facilitated the creation of North and South Vietnam as independent states. The communist Viet Minh, led by Ho Chi Minh, took control of the north and began working to spread communist insurgency throughout the region. Their actions led to war with South Vietnam and the eventual involvement of the United States-led coalition from 1963-75 that came to become known as the Vietnam War. After nearly twenty years of fighting, the US finally withdrew from South Vietnam and the state fell to a final North Vietnamese military offensive. The Vietnamese communists throughout the war had been supported militarily, economically, and politically by other members of the communist bloc, particularly the Soviet Union and neighboring China. They remained neutral when the Sino-Soviet Split emerged in the early 1960s so that the aid continued to flow to their war effort and largely because of the intentional direction of Ho Chi Minh to maintain this position. Once Ho had passed and the war ended, the pro-Soviet Vietnamese leadership acted on their anti-Chinese sentiments and declared their support for the USSR, looking to create ties with the Soviets and gain protection from China. This didn't stop China from attacking Vietnam in 1979, but the ensuing stalemate and cessation of hostilities only drove Vietnam more into the camp of Moscow. Vietnam would develop this bond by permitting Soviet use of the strategically valuable Cam Ranh Bay naval base, which served as a major port for the Soviet Navy throughout the Cold War. The hostilities with China and their overt support for the USSR remained a powerful sentiment in the Vietnamese communist party until the end of the Cold War. The historical circumstances of this case lead us to hypothesize that the influence levels in Vietnam will substantially favor the USSR, reflecting their overt support for Moscow in the Sino-Soviet Conflict. Chinese influence should decline after the conclusion of the Vietnam War and are expected to plunge after the 1979 border war.

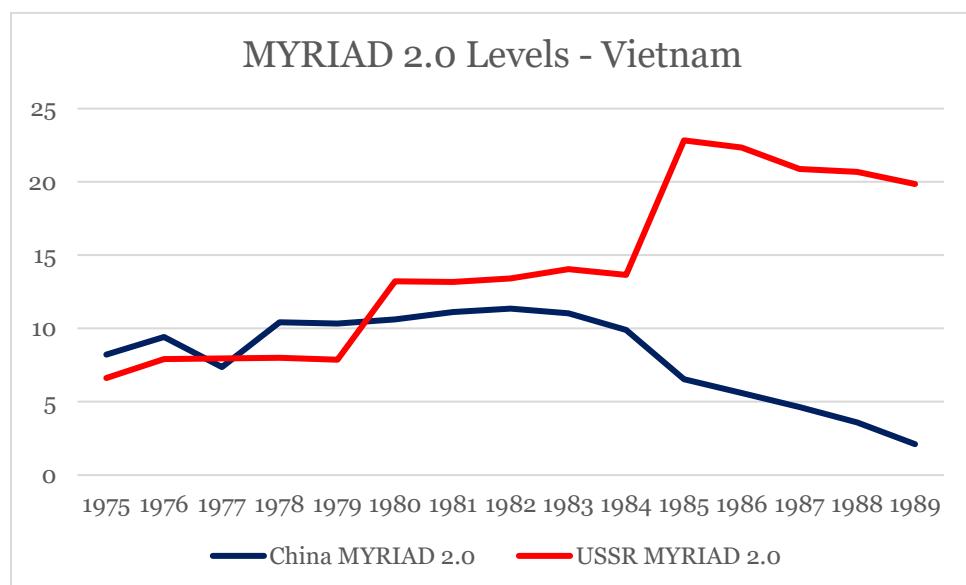
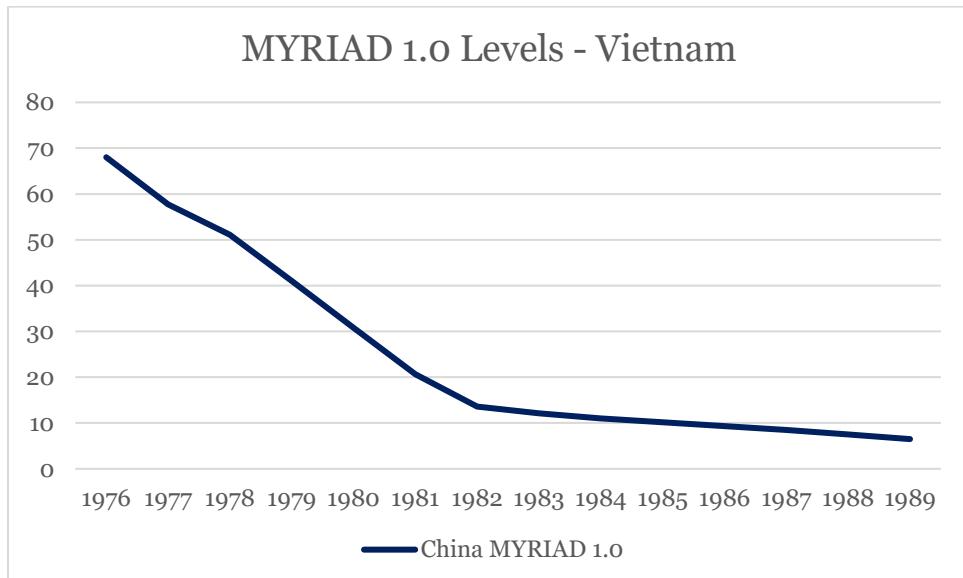
Coverage for China and the Soviet Union in Vietnam during the Sino-Soviet Split between the indices is unfortunately lacking somewhat in consistency. The FBIC Index lacks USSR measurements before 1985 due to a lack of total trade data. MYRIAD 1.0 does not have Soviet output at all due to an absence of measurements for the treaty index component. Only MYRIAD 2.0 has full coverage for both states during the entire sample range. This will lead us to make some limited comparisons and infer some possible expectations based on visible trends. Comparative separation between Chinese and Soviet influence in the FBIC Index appears to be substantial when USSR measurements begin in 1985, which aligns with our expectations and the historical context. MYRIAD 2.0 separations are much more volatile and are less reflective of the situation in Vietnam. While Chinese influence as a matter of their military support during the Vietnam War may have been stronger than the Soviet Union's, the narrow gap between the two after Vietnam declared for Moscow is suspect. The massive separation in 1985 also appears somewhat unusual, as that was during the period of Moscow's withdrawal from internationalism. It is more likely that a data issue led to the narrow separation in the 1980s where there should have been

gradual expansion to meet the 1985 level more steadily. This trend appears somewhat in the FBIC graphical depiction, but remains an inferred expectation since we lack concrete data to support this fully.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to generate some differing directions and magnitudes of Chinese and Soviet influence in Vietnam, where available. FBIC displays a fairly substantial level of influence to scale for China immediately after the Vietnam War, followed by a gradual decline to near zero after the outbreak of the 1979 Sino-Vietnamese War. MYRIAD 1.0 displays a similar negative trend and level of influence as FBIC, with a sharper decline after the border conflict between China and Vietnam. The major discrepancy in Chinese influence comes from the MYRIAD 2.0 output, which does not particularly match either index during the 1975-84 period. There is a gradual increase of Chinese influence throughout the 1970s and early 1980s, minus one dip in 1977 that corrects the following year. It is not until 1984 that MYRIAD 2.0 actually shows a decline for Chinese influence, five years after the two states went to war. Soviet influence levels in the FBIC Index only pick up from 1985-89, but the substantial levels and upward trend allow us to extrapolate a few theories about what the missing period would look like. When it picks up in 1985, Soviet levels are already at a comparatively high magnitude, similar to what is seen in Eastern Europe. This indicates that the USSR has by that point consolidated a major hold on Vietnamese influence. The initial upward direction indicates that this point was part of an upward trend that likely started after the Sino-Vietnamese war, if not earlier. It is likely if the data existed, we would see Soviet influence levels substantially higher than China's, supporting our hypothesis explaining their declaration on the side of Moscow in the Sino-Soviet Split. MYRIAD 2.0 influence levels for the Soviet Union are somewhat comparable in directionality, but the magnitude differs. During the 1970s, Soviet influence is mostly lower than Chinese, which only switches position after the 1979 war. The increase is only moderate and for most of the 1980s remains fairly plateaued and not far separated from China's, which is odd considering Vietnam went to war with China and became a vocal supporter of Moscow during that period. Only in 1985 does Soviet influence leap far ahead of China, which does not correspond much with the circumstances of their relations. Generally, the MYRIAD 2.0 output for the Soviet Union are directionally correct, but the magnitude and timing do not cohere to what we would expect based on history.

The FBIC, MYRIAD 1.0, and MYRIAD 2.0 appear to display similar trends where available in Chinese and Soviet influence in Vietnam during the Sino-Soviet Split. The relative separation with higher Soviet influence that is seen in places and inferred in others allows us to cautiously theorize that the influence indices support our hypothesis on why Vietnam declared for Moscow and rebuked Beijing in the conflict. Chinese influence levels across the indices all have a general negative slope following the 1979 border war with Vietnam that does not recover, although the timing of the decline differs in MYRIAD 2.0 in a way that is inconsistent with expectations. Soviet influence appears high for the readings that we can collect, but the MYRIAD 2.0 levels once again have unusual magnitudes. We can conclude that with the data available, the FBIC Index and MYRIAD 1.0 appear to behave as would be expected, while MYRIAD 2.0 performs generally correct but not as accurately despite the full temporal and case coverage.





Conclusions

This study has examined the concept validity of the FBIC, MYRIAD 1.0, and MYRIAD 2.0 indices as they apply to communist regimes supporting either China or the Soviet Union during the ideological conflict for international leadership of the bloc known as the Sino-Soviet Split. The Sino-Soviet Split developed as the culmination of worsening relations between the Soviet Union and China after the death of Joseph Stalin, when the Soviet leadership entered a period of reform that was viewed by Mao's party as antithetical to communism. After years of exchanging verbal hostilities, the two states finally severed ties in the 1960s and separated the rest of the communist world into separate camps. The Soviet Union had a clear advantage as the long-time leader of this bloc, but China was able to break a few regimes away from Moscow. Aggression between them during the split took many forms, including influence campaigns and political violence in the parties of tertiary communist regimes. Over time the two became rivals and the conflict only came to a formal end in the concluding years of the Cold War.

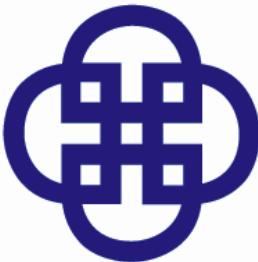
We focused the analysis on state-specific studies of each communist regime that existed during the period, examining where available the individual and comparative influence of China and the USSR within each of those countries. Each analytical section included descriptions of directionality trends, magnitudes of influence, and comparative advantage gaps between the two states during the temporal sample. As best was possible, all three indices were included depending on coverage, although there were a number of data gaps that were accounted for. We find evidence that generally the directionality of all three indices for China and the Soviet Union's influence over time appear to cohere with the historical expectations developed through each case study. However, the timing and magnitude of these changes differ substantially. The FBIC Index appears to be the closest reflection of the historical reality of Chinese and Soviet influence in each state. MYRIAD 1.0 only produces output for Chinese influence due to lacking treaty index data, but their readings for this one state appear to be generally correct according to our expectations. MYRIAD 2.0 mostly performs well with directionality of influence changes, but the magnitude is questionable in many cases and there are a few periods that their rates of change move in patterns that are the opposite of expectations. We can conclude that while coverage varies between the indices, the FBIC Index presents the most encompassing and historically accurate influence patterns for China and the Soviet Union in communist states worldwide during the Sino-Soviet Split.

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DIPLOMETRICS

**QUALITATIVE VALIDATION STUDY OF
INFLUENCE INDICES:**

**BELLIGERENT COALITIONS IN THE
VIETNAM WAR**
MARCH 2019

AUSTIN MATTHEWS

Chapter 4

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Executive Summary

1. This study compares and contrasts three indices measuring interstate influence within the case of coalitions in the Vietnam War. The three influence indices included are: the Foreign Bilateral Influence Capacity (FBIC) Index, Merged Yearly Rational Interaction Affinity & Dependence (MYRIAD) 1.0, and Merged Yearly Rational Interaction Affinity & Dependence (MYRIAD) 2.0.
2. The three influence indices are examined at the level of states that were involved in the Vietnam War on the side of either South or North Vietnam. As a proxy for these smaller states, the directed influence of China and the United States are applied to each case. We examine Chinese and American influence in nine states that participated militarily in the conflict. Index output for two cases are unavailable by source: FBIC for North Korea due to lack of total trade data; MYRIAD 1.0 for the Soviet Union due to lack of treaty index data.
3. We find evidence that the directionality, magnitude, and comparative advantage measurements of influence produced by the FBIC Index and MYRIAD 1.0 are more similar than those of MYRIAD 2.0. Historical analysis of the trends support findings that the FBIC Index more closely reflects the actual progress of state involvement in the Vietnam War than MYRIAD 1.0 or MYRIAD 2.0 in several cases. The remaining cases show fairly similar results across indices.
4. We conclude that the FBIC Index and MYRIAD 1.0 produce the most historically accurate measurements of Chinese and American influence on the sample states, largely confirming our theoretical expectations about alignments in the conflict. The key distinctions are the smoothness of slope lines for FBIC, disparity in the simplicity of calculating and forecasting the indices, and several unexplained trends in MYRIAD 1.0 measurements that do not reflect historical events.

Descriptive Accuracy of Indices in the Case Study

| Target Country | FBIC | MYRIAD 1.0 | MYRIAD 2.0 |
|----------------|--------|------------|------------|
| Australia | Strong | Strong | Strong |
| Cambodia | Strong | Moderate | Strong |
| Laos | Strong | Strong | Strong |
| New Zealand | Strong | Strong | Moderate |
| North Korea | N/A | Strong | Moderate |
| Philippines | Strong | Strong | Strong |
| South Korea | Strong | Moderate | Strong |
| Soviet Union | Strong | N/A | Weak |
| Thailand | Strong | Strong | Moderate |

Introduction

In the late Nineteenth Century, France occupied and established a colonial regime in the Southeast Asian region referred to historically as Indochina (currently Cambodia, Laos, and Vietnam). Although they preserved the prior local emperor as a figurehead, French Indochina was governed through colonial administrators and was rapidly turned into an agricultural peripheral state for French interests. Despite some nationalist uprisings prompted by pre-existing noble elites, the French colonial occupiers were successful in preserving their control over Indochina into the Twentieth Century. Vietnam was increasingly incorporated into the French international system and the Vietnamese as a people were exposed at greater and greater levels to French society, including a sizable number of Vietnamese students sent to study abroad in France. However, these students would ironically evolve into the backbone of future Vietnamese nationalist movements, with some advocating radical action in support of anti-colonialism and national self-determination. Despite the economic prosperity Vietnam was experiencing and the emergence of an international merchant class, many Vietnamese resented French rule and were supportive or at least sympathetic to the nationalist movements.

The initiation of the Second World War affected Vietnam in significant ways, both due to the European front and more directly the Pacific theater of the conflict. French colonial administration of Indochina collapsed in June 1940 when the Paris government capitulated to Nazi Germany after six weeks following a massive invasion. Three months later, the Japanese Empire attacked Indochina as a part of the coordinated military campaign, with French resistance to the invasion lasting only five days. Even though control of Indochina was nominally transferred to the puppet Vichy French government, the Japanese military continued their occupation. Later in the war in March 1944, the Japanese broke their agreement with the French Indochinese administrative regime and took direct control of the region. The insurgent Viet Minh movement, led in part by communist Ho Chi Minh, revolted against the Japanese occupiers and aided the Allies (principally the US and UK) in Indochina.

The defeat of Japan in 1945 led to major power shifts in Indochina. Ho Chi Minh immediately declared the sovereignty of the Democratic Republic of Vietnam in the northern portion of Vietnamese Indochina, rejecting the return of the French colonial government and making claim to the entire Vietnamese region. France fought the First Indochina War against the North Vietnamese communist government, but they were administratively hampered by reconstruction efforts back home in Europe. The Battle of Bien Dien Phu resulted in a massive defeat for the French administrative military and the July 1954 Geneva Conference saw the legal creation of a de-colonized Indochina. The region was split into the communist Democratic Republic of Vietnam (North Vietnam), the State of Vietnam (South Vietnam), the Kingdom of Laos, and the Kingdom of Cambodia. The French withdrew following the conclusion of the agreement, ending their almost 70 year colonial hold over Southeast Asia.

The establishment of North and South Vietnam came with major geo-political consequences, particularly in the eyes of the United States. The Americans feared the further spread of communism, particularly because of their earlier involvement in the Korean War, and wished to pursue a policy whereby South Vietnam could be bolstered as a US proxy in the region. North Vietnam aimed to encourage the insurgencies growing in the south attributed to the corrupt reign of President Ngo Dinh Diem. Viet Minh cadres engaged in guerilla tactics to induce further opposition to the Diem government, hoping a full-scale revolt would occur. North and South Vietnam continued hostile relations until in March 1959 the DRV declared its intention to unite Vietnam by military force. They invaded parts of eastern Laos a few months later with the intent of establishing a supply channel granting them access deep into South Vietnam, known popularly as the “Ho Chi Minh Trail.”

The United States had militarily supported South Vietnam and with the election of John F. Kennedy in 1960 began to pursue a more aggressive line toward emergent communist regimes. Diem’s regime was strengthened and American advisors trained the South Vietnamese army, which was widely seen as weak and ineffective. Covert operations and direct aid were the primary weapons of choice for the US involvement until a major incident changed the course of the conflict.

The United States Navy vessel USS Maddox on 31 July 1964 entered the territorial waters of the DRV in the channel known as the Gulf of Tonkin on a mission to collect intelligence using electronic support measures. Within two days the Maddox had been discovered by North Vietnamese patrols and was being tracked. The Maddox fired warning shots at three DRV vessels, which returned fire on 2 August. US fighter aircraft from a nearby carrier intercepted the North

Vietnamese torpedo boats after being radioed for aid by the Maddox. The Maddox retreated and one DRV ship was sunk during the incident. On 4 August, the Maddox was redeployed into North Vietnamese waters and allegedly came under attack by two more torpedo boats. While the voracity of this incident have been highly controversial, the hasty response of the Johnson Administration had extreme consequences. That day at midnight, Johnson made a television address to the US public about the incident and he emphasized that a military response was now necessary.

Three days later on 7 August 1964, Congress passed the “Gulf of Tonkin” resolution, which authorized the Johnson Administration to engage in military force in Southeast Asia. This resolution was not a declaration of war, but still vested the executive branch with authorization to directly attack the DRV and Vietcong in South Vietnam. The US launched major air campaigns against the DRV early the following year and by March 1965 had begun to reinforce their ground presence in South Vietnam, all while covertly expanding their attacks into Cambodia and Laos to cut off communist cross-border activities. By 1965, the major American ground phase of the Vietnam War had begun.

Methods and Hypotheses

The sample of states in these analyses will include those that directly participated in supporting either North or South Vietnam militarily in some capacity during the Vietnam War, acknowledged as the period of 1955-1975. These states include: Australia, Cambodia, Laos, New Zealand, North Korea, the Philippines, South Korea, the Soviet Union, and Thailand. The primary states whose influence will be examined include the United States (as a proxy for their smaller ally, the Republic of Vietnam) and the People’s Republic of China (as a proxy for their smaller ally, the Democratic Republic of Vietnam). We select these two states to serve as the closest approximate allies and co-belligerents to the two Vietnams, for data and modeling reasons. Historical data on the RVN and DRV are extremely limited, making the component variable coverage an issue when generating measurements. Further, it is unlikely that either side during the war, as it immediately followed their independence, would have a significant influence on many states. Instead of attempting to model marginal influence, it is more theoretically and empirically plausible to use their two most significant co-belligerents, China and the United States, as proxies for their interests. Based on this proxy system, we develop two general hypotheses that should theoretically predict the coalition that each militarily-involved state in the Vietnam War entered in support of based on the levels of domestic influence China and the United States had in each. They are presented as follows:

Hypothesis 1: States that participated in the Vietnam War on the side of North Vietnam will have higher Chinese influence than American.

Hypothesis 2: States that participates in the Vietnam War on the side of South Vietnam will have higher American influence than Chinese.

The following section will investigate the performance of the FBIC, MYRIAD 1.0, and MYRIAD 2.0 influence indices within the context of the Vietnam War through a series of state-specific investigations. These are three different measurements that are modeled to capture the influence that one state has on another over time. While they attempt to model the same concept, the variables used to calculate them and their min/max scale vary. Each state included was actively involved in the conflict as a co-belligerent and had a definitive position on the episode that we can analyze. Each of our state-specific subsections will be organized in the following manner. We begin by developing a brief historical case study that describes each state’s pretext and entry into the Vietnam War, highlighting their considerations regarding their determined side in the conflict. This builds into an overview of their military participation and any changes in commitment before their eventual exit. Second, we provide descriptive and comparative analyses on how each of the three influence indices perform at predicting the position each state took in the conflict, looking at directionality and trends as they apply to the historical context. Finally, we summarize the performance of the indices and discuss how well they support our theoretically informed hypotheses and expectations. This includes an assessment of their relative strengths and weaknesses at accurately reflecting the actual historical conditions of the domestic-level influence of China and the United States on the state’s decision to participate in the Vietnam War by joining a particular coalition.

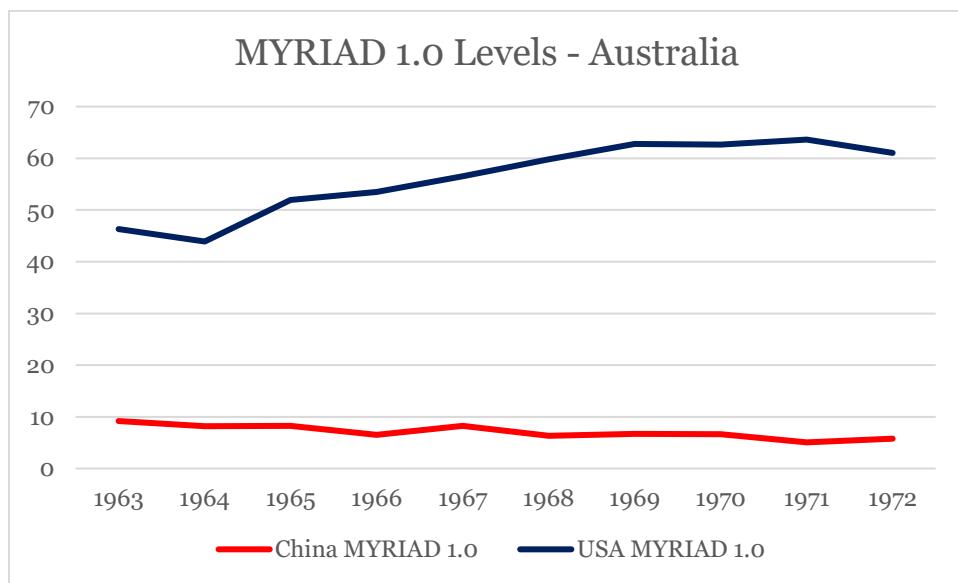
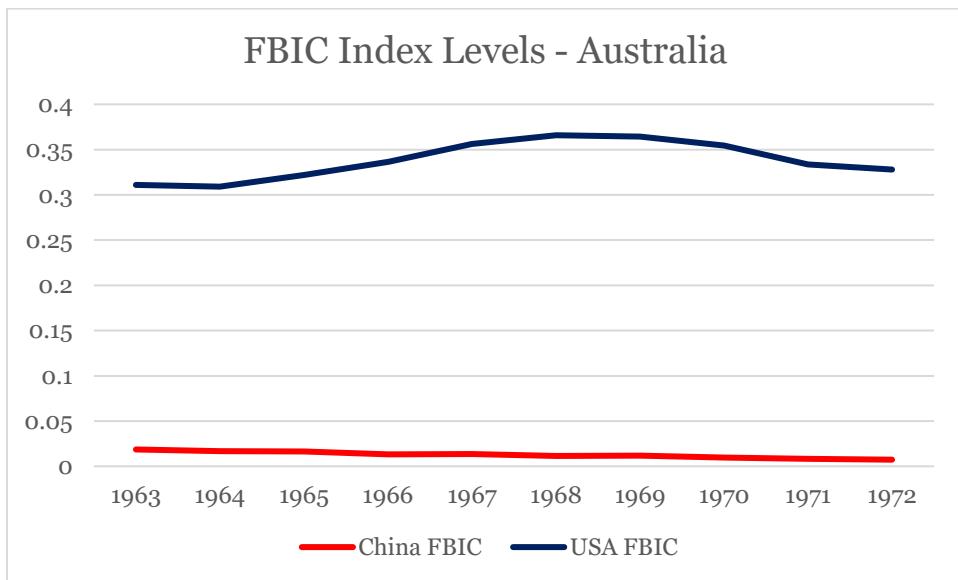
Descriptive Analyses

Australia

Australia entered the Vietnam War partially due to their participation in the ANZUS Pact with the United States and New Zealand, although they were not compelled as much as willing participants. The ANZUS Pact was relatively new, having been signed in 1951, and Australia was seeking to affirm their relationship with the United States. This was a self-interested objective, because Australia feared the spread of communism in South-East Asia might eventually spread to the Pacific islands and pose a threat to their mainland defense. There was also the rise of Chinese power in East Asia, which Australia viewed as a danger to regional security. Australia responded to the request for participation made by South Vietnam and the United States by initially sending military advisors in 1962 that would serve as instructors in jungle warfare and counter-insurgency. By 1964, Australia had begun to send more support personnel like medics and engineers, increasing their commitment to the conflict. At this time, they also instituted conscription, seeking to boost their pool of draft-ready military recruits, expecting the conflict was going to become larger. More Australian troops were requested in 1965, which resulted in the deployment of a full battalion to South Vietnam. The historical circumstances outlined here motivate us to hypothesize that during the period of Australia's active military role in the Vietnam War, the United States will have a substantially higher influence measurements than China.

There is maximum coverage for all three measures of influence for China and the United States in Australia during the period of the Vietnam War. The FBIC, MYRIAD 1.0, and MYRIAD 2.0 all depict a large disparity in influence, with the substantial advantage going to the United States throughout the temporal period. This meets our general expectations given the relationship between them, considering the ANZAC Pact and historical ties. China for all three indices maintains a marginal level of influence over Australia, declining over time from a sample high in 1963. While there appear to be some sudden small increases and decreases in MYRIAD 1.0 and MYRIAD 2.0, all appear to cohere to the general negative trend. Considering the marginal levels for China and the common directionality, any extrapolation of differences between the three indices for this relationship would yield low-impact conclusions. Similar to the trends for Chinese influence on Australia, the directionality and general level for the United States in this case appear to be similar across the indices. There is a fairly consistent low-period in the first two years of the sample, increasing as would be expected considering the growth of their relationship as co-belligerents. The FBIC Index and MYRIAD 1.0 depict a slight drop from 1963-64 before American influence increases steadily in the following years. Contrast this to MYRIAD 2.0, which maintains a steady positive directional trend. Once the 1970s begin, FBIC and MYRIAD 1.0 both show a downward trend in American influence in Australia going into 1972, whereas MYRIAD 2.0 continues its upward movement. The downward shift in FBIC and MYRIAD 1.0 are likely closer to historical accuracy, as this was the period after the escalation of the conflict in the late 1960s when military involvement was beginning to wind down in Vietnam.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to portray the accurate historical context of Australia's entry into the Vietnam War on the side of the United States and South Vietnam. Our hypothesis predicting their participation on the side of the state with the higher level of influence, the United States in this case, appears to be confirmed by all three indices. Influence levels for China and the United States across the indices maintain an agreeable level of disparity between the two states, although comparative directionality differs. The FBIC Index and MYRIAD 1.0 depict an initial drop and another decline later in the sample, while MYRIAD 2.0 shows a continual increase throughout the temporal sample. Considering the context of withdrawal in the 1970s, it is likely that the FBIC and MYRIAD 1.0 indices are more accurate in their depiction of American influence during this period than is the MYRIAD 2.0. We can conclude that while all three appear to have concept validity in comparing American and Chinese influence levels in Australia, the changes in directionality for the United States in the FBIC Index and MYRIAD more closely reflect history.



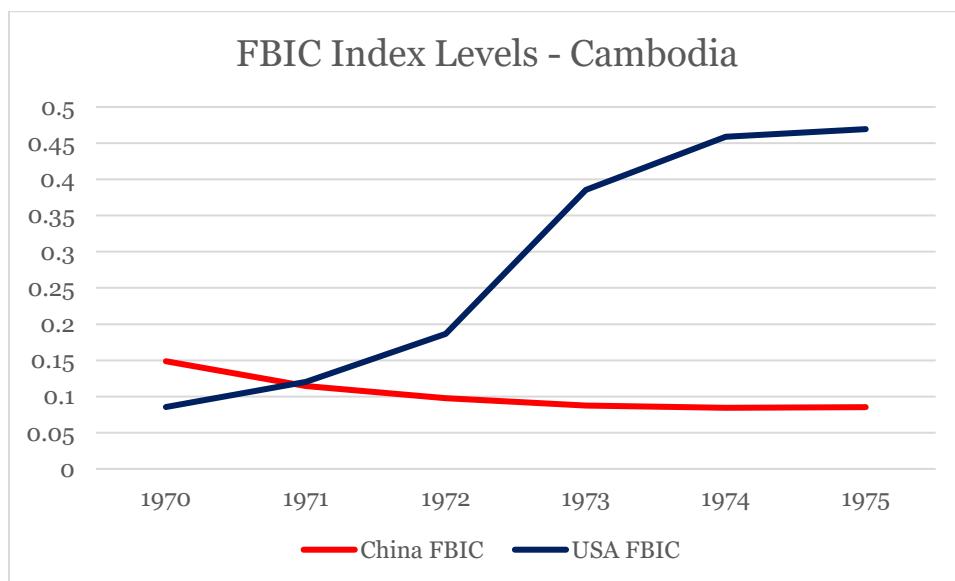
Cambodia

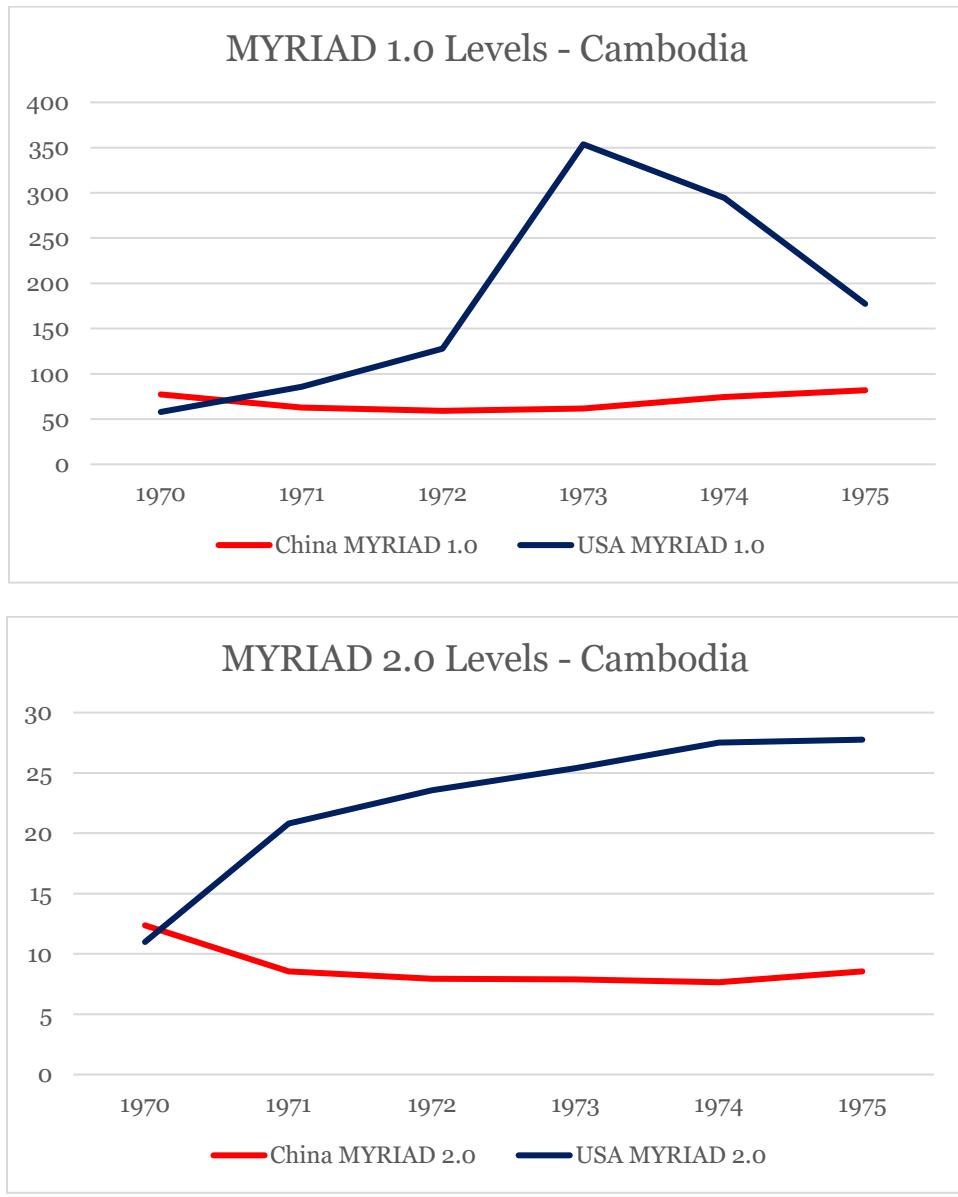
Cambodia during the Vietnam War era presents an interesting shift in allegiance that had severe consequences for the future of the country. Prior to the Geneva Peace Accords, Cambodia had been granted independence from its colonial French administrators, who viewed that state as a lower priority than ensuring their control over neighboring Vietnam. The Kingdom of Cambodia was formed and government control transferred to Prince Norodom Sihanouk, who had been the state's acting monarch since 1941. Sihanouk abdicated his throne in 1955 and transitioned the state into a civilian constitutional monarchy. He acted as Premier of the state into the 1960s, but his initial orientation toward the United States cooled during a period of economic nationalization in Cambodia. Suspecting the United States of financing anti-communist rebels in his state, Sihanouk signed a secret accord with North Vietnam and began accepting Chinese aid, orienting his policies and international outlook toward the communist bloc. Sihanouk controlled the state de jure or at least de facto until 1970, when former Prime Minister and General Lon Nol launched a coup d'état while Sihanouk was out of the country touring China and the Soviet Union. The government was seized by Lon Nol and he immediately shifted the regime's loyalty back to the United States, who were suspected of abetting in the coup against Prince Sihanouk. In response, the North Vietnamese initiated a military offensive into Cambodia, which was met by American and South Vietnamese forces invited to operate within the state by Lon Nol. From that period onward, Cambodia would continue to be a major front of the conflict, with the government aligned with the United States to as a defensive partnership aimed to

push back the DRV. The historical circumstances in Cambodia lead us to hypothesize that from 1971-75, after Lon Nol took power and aligned against North Vietnam, the United States will have influence within the state compared to China.

There is maximum coverage for all three measurements of influence for China and the United States in Cambodia during the period of the Vietnam War. We also include 1970 in the graphical depictions for the sake of contrasting the Prince Sihanouk pro-China period and the Lon Nol pro-American period of Cambodian history in the 1970s. As would be expected, Chinese influence was much higher in all three indices during the Sihanouk era, when he was orienting Cambodia to the communist bloc. After Lon Nol's coup, we see an immediate shift toward higher American influence across the measurements, reflecting this historical context. Chinese influence continues to decline throughout the period as American influence increases. There is little difference in the directionality and level disparity for Chinese influence between FBIC, MYRIAD 1.0, and MYRIAD 2.0. However, there are major differences in the American influence level shifts between the three indices, meriting discussion as to which is most accurate according to the historical context. American influence across the indices increases after Lon Nol's coup and continues to grow substantially into 1973. The large difference is that from 1973-75, the FBIC Index and MYRIAD 2.0 depict a continued positive direction, while MYRIAD 1.0 shows a sharp decrease in American influence during the same years. Despite the conclusion of the Paris Peace Accords in 1973, the United States maintained a military presence in Cambodia to support Lon Nol's government, which included a continuation of their bombing campaign against the Khmer Rouge. Contrary to their withdrawn support for Laos and South Vietnam, United States backing for Cambodia continued past 1973 into 1975, until the evacuation of American personnel and Cambodian politicians before the fall of Phnom Penh to the communist advance. Thus, it is unlikely that there was a decrease of American influence in Cambodia before the Khmer Rouge seized the regime in 1975.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all accurately depict the 1971 shift in Cambodia between Chinese and American allegiance. There is a clear Chinese advantage during the Sihanouk period, followed by an American upsurge following the Lon Nol coup. The general positive directionality continues until 1973, when MYRIAD 1.0 takes a sharp decline. There appears to be no historical context supporting this trend, with the increases seen in the FBIC Index and MYRIAD 2.0 more reflective of actual situation. We can conclude that all three measurements of influence accurately reflect the early comparative levels and the gradual decline of Chinese capacity within Cambodia. However, FBIC and MYRIAD 2.0 more closely represent the expected trend of American influence in the later years of the temporal sample when compared with MYRIAD 1.0's divergence.





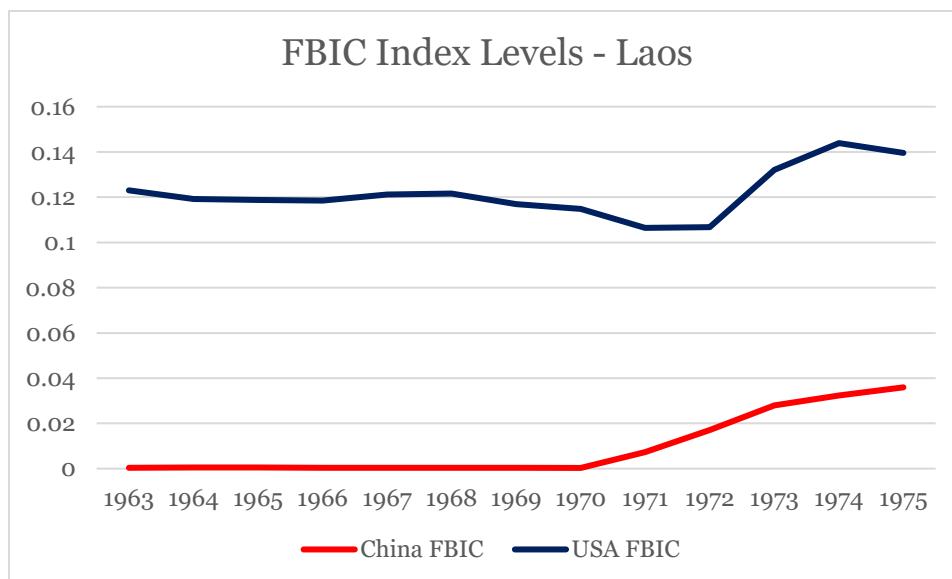
Laos

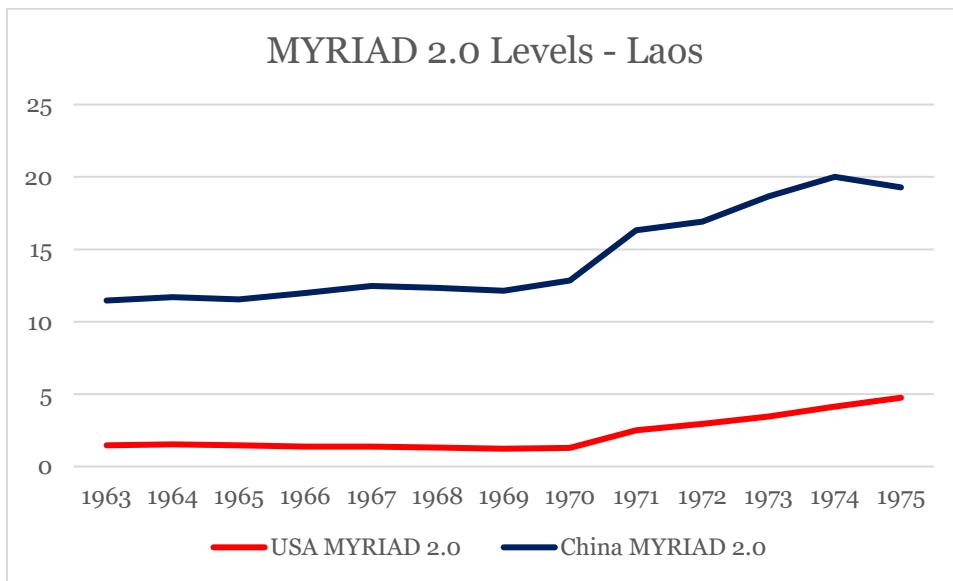
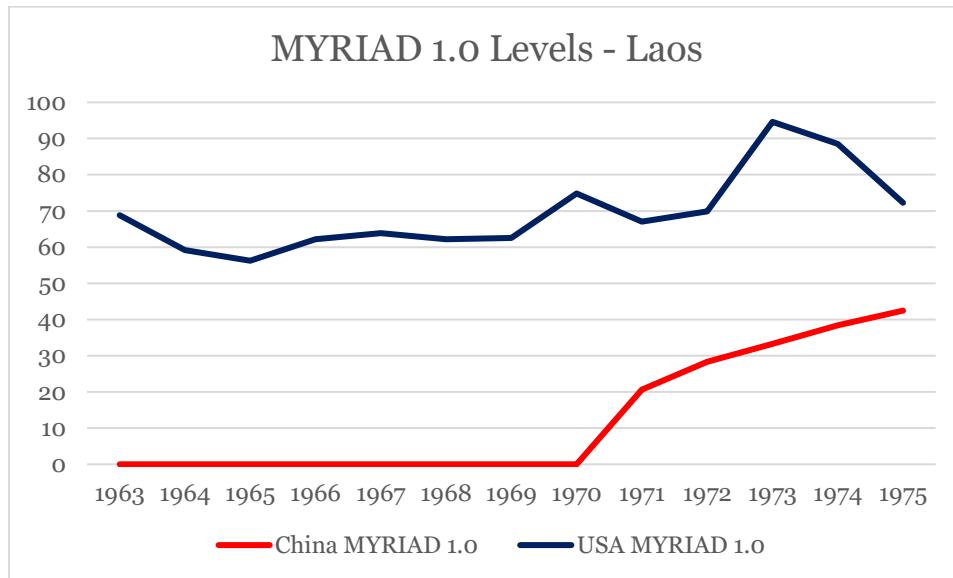
The Kingdom of Laos emerged from French colonial administration in 1953 after the signing of the Franco-Lao Treaty handed over power to a domestic Laotian government organized as a constitutional monarchy. Early politics in Laos were contentious, with political conflicts between conservative monarchists, liberal centrists, and communists backed by the neighboring Viet Minh movement. However, Laos oriented its international position very early on to the United States, which reciprocated with economic and military aid. The aid was directed by the state to help build the capacity to halt their own domestic communist movement, the Pathet Lao, which had been built out from involvement with the Viet Minh. Laos became the recipient of a substantial amount of foreign aid from the United States and also was supported by neighboring Thailand and former colonial overseer France. Despite the support received from abroad, the Laotian government was unable to suppress the Pathet Lao's growth and by 1959 the insurgency had turned into a full civil war. Laos became a proxy fight for the North Vietnamese and United States, both seeking to push their respective allies into gaining the advantage. Parts of eastern Laos were occupied and used by the North Vietnamese to transport troops and military supplies into South Vietnam. The Laotian military was largely unsuccessful in pushing out the Pathet Lao and North Vietnamese, even with American troops and aircraft as support. Eventually, the United States began to withdraw from Laos in 1973 as a part of their commitment to the Paris Peace Accords, leaving the royalist government behind in the midst of civil war. By 1975, the North Vietnamese had redirected military support to the Pathet Lao, which defeated the Laotian military, leading to the collapse of the royalist government. This historical circumstances in Laos lead us to

hypothesize that substantial American influence in the country led them to enter the Vietnam War on the side of South Vietnam as a co-belligerent.

There is maximum coverage for all three measurements of influence for China and the United States in Laos during the period of the Vietnam War. The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all display fairly similar comparative trends and directionality for both states of interest. Chinese influence in Laos remains marginal across the indices until 1970, when all report a general increase every year until 1975. The suddenness of this increase in the MYRIAD 1.0 index is notable compared to the gradual increase in FBIC and MYRIAD 2.0. The influence of the United States in Laos in the early years is gradual in all cases, but directionality differs slightly. FBIC shows a slight negative direction of American influence, MYRIAD 1.0 depicts a less gradual decrease, while MYRIAD 2.0 measures a slight increase over time. However, this period of 1963-1970 is more or less a general plateau for all three, with increases or decreases remaining small and then evening out. The period of 1970-75 is far more volatile and takes clear directional changes across the indices. The FBIC Index after a brief dip from 1970-72 begins to register a major increase in American influence between the years 1972-74, before taking a slight decline going into 1975. MYRIAD 1.0 reflects this trend, sharply increasing in the same year, but decreases again sharply going into 1974 and continuing into 1975. MYRIAD 2.0 also reflects this late sample increase and the 1974-75 decrease in influence, although the levels are much more gradual. It also does not reflect the 1971-72 decrease present in the other two indices. It is likely in the historical context that this brief dip in influence was accurate, as the US in 1970 began to reduce its presence and spending. However, the massive counterattacks by the Pathet Lao and North Vietnamese in 1971-72 led to a renewed American commitment. Once the Paris Peace Accords are signed in 1973, we see either a gradual peak and decline (FBIC, MYRIAD 2.0) or an immediate dip (MYRIAD 1.0). The exact years may be due to lagged variables or gradual withdrawal by the United States, but all indices generally reflect the historical reality.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to accurately portray the historical context of Laos' participation in the Vietnam War on the side of the United States and South Vietnam. Our hypothesis predicting their entry is confirmed by all three indices. General directionality and the influence gap between China and the United States appear to cohere across measurements. Slight differences in changes or years of shifts appear to be minimal and may be a modeling artifact in certain cases. Scale may also account for the severity of increases and decreases, appearing more dramatic than they actually are in a general range. We can conclude that in the case of Laos' participation in the Vietnam War, all three influence indices support our theoretical expectations and their output reflects the historical conditions of Chinese and American influence in the state.





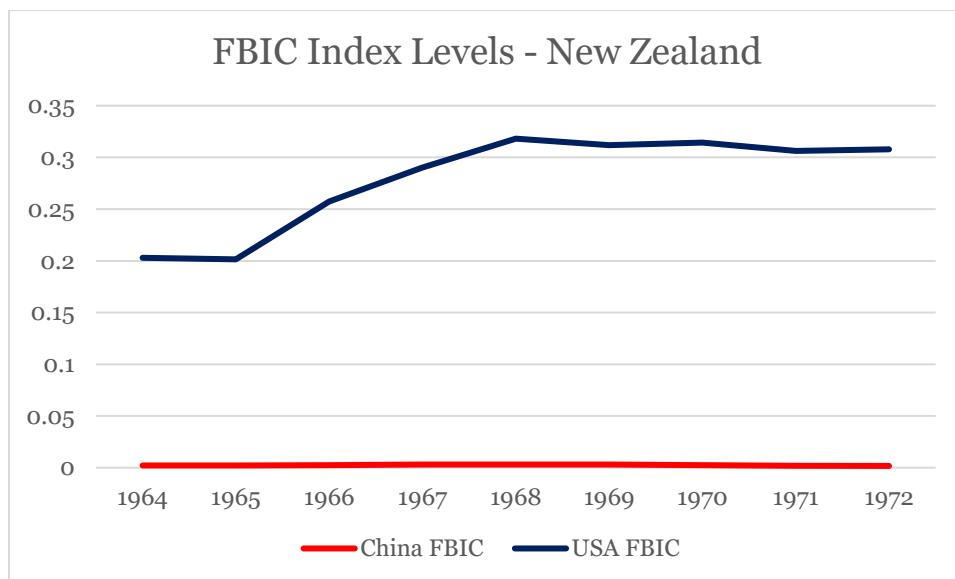
New Zealand

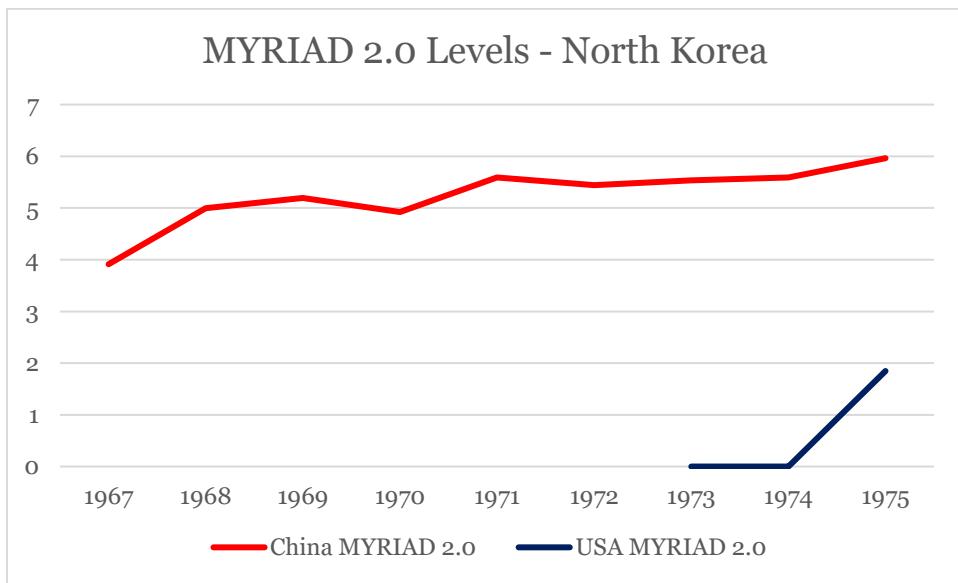
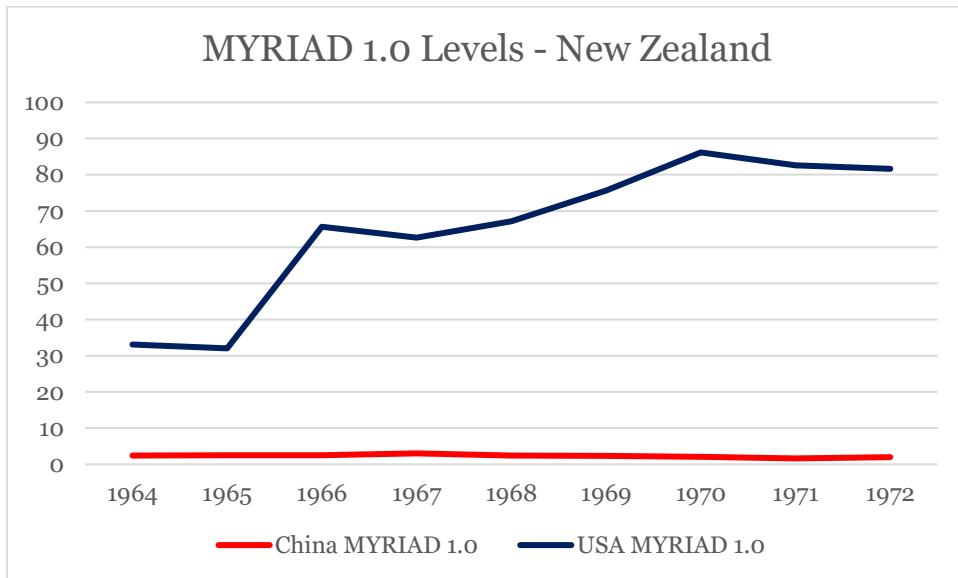
New Zealand, like their ANZUS ally Australia, viewed the Vietnam War through the objectives of halting the spread of communism within their region and demonstrating their commitment to the nascent alliance. They committed to sending forces at the request of South Vietnam in 1964, when engineer and medic platoons were deployed to the combat zone. In 1965, New Zealand howitzer artillery arrived attached to American airborne divisions, followed the next year by combat infantry. While their military presence was small, relative to their population, by the late 1960s they had contributed around 550 personnel per year. They also remained stationed close to major South Vietnamese cities, not engaging often in offensive military actions. New Zealand in the wind-down of the Vietnam War withdrew their infantry forces in late 1971, although support troops remained for additional years. Despite being extremely controversial with the general population, New Zealand's military contribution to the Vietnam War was self-financed, having refused grants from the United States intended to bankroll their deployment. The historical circumstances in New Zealand lead us to hypothesize that during the period of the conflict, American influence will be substantially higher than China's, reflected in their participation as a co-belligerent on the side of South Vietnam.

There is maximum coverage for all three measurements of influence for China and the United States in New Zealand during the period of their involvement in the Vietnam War. There is general agreement across the FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 regarding the continuously low Chinese influence throughout the entire period. Their influence level is marginal for each until around 1973, when all three show a slight increase, although it is comparatively small when

considered in scale. Once again, it is the American influence levels in this case that present the most variation and merit further descriptive analysis and discussion. All of the indices describe a low point in 1963 for American influence on New Zealand, followed by a general increase. This increase for FBIC and MYRIAD 1.0 is more sudden, while MYRIAD 2.0 depicts a more gradual positive slope. The FBIC Index takes an upward slope until 1969, when American influence appears to plateau at around 0.3, decreasing only slightly in 1975. MYRIAD 1.0 differs from the other two indices by indicating that there was a dip in American influence in 1967 that rebounds in 1968 before continuing its general increase. There does not appear to be any historical context for this dip; in fact it was during a year when New Zealand increased its military commitment to the conflict. MYRIAD 2.0 only depicts an increase in American influence throughout the sample, with little variation between years. FBIC, MYRIAD 1.0, and MYRIAD 2.0 depict a slight decrease in American influence going into 1971-72 which coincides with their eventual withdrawal from Vietnam prior to the Paris Peace Accords. The degree of this decline differs between the three indices, but appears to have been marginal in all cases.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to accurately depict the historical context of New Zealand's entry into the Vietnam War. Our hypothesis predicting their entry as a condition of substantially higher American than Chinese influence on the side of South Vietnam appears to be confirmed across influence measurements. All three indices agree that there is a high level of American influence while Chinese remains marginal throughout the period. The growth of American influence differs a bit between indices, but remains generally positive for the first part of the temporal range. The gradual decrease toward the 1970s appears in FBIC and MYRIAD 1.0, although the duration of this slight decline differs. Generally, we see levels and trends across the three indices that are comparatively similar and explainable. We can conclude that all three measurements of influence in this case appear to accurately reflect our theoretical expectations and the historical context of the case of New Zealand in the Vietnam War.



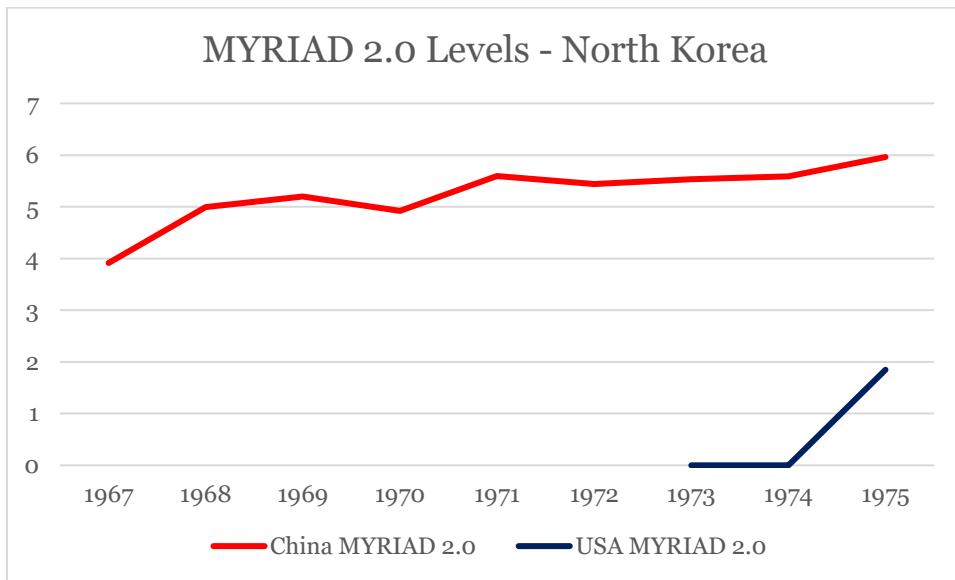
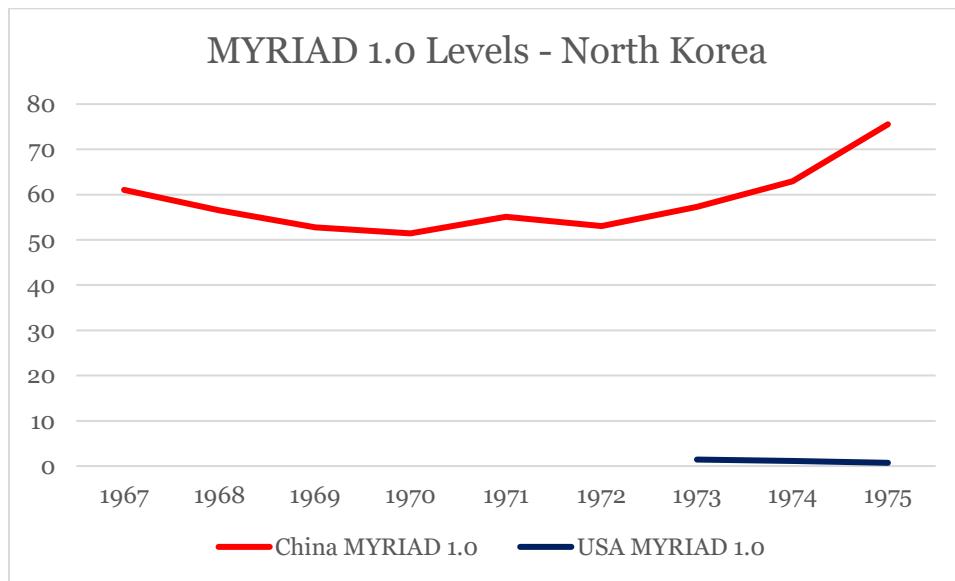


North Korea

North Korea's participation in the Vietnam War on the side of North Vietnam was significant, considering the difficulty their involvement posed. Support for the DRV from the Kim Il Sung regime was strong, as they were fraternal members in the international communist movement. However, Kim also calculated that involvement in this anti-US conflict might help mobilize his population, who were still reeling from the Korean War. In 1965, North Korea deployed an engineer regiment to North Vietnam to participate in the construction of a bunkered machinery factory. North Korea's request to contribute an air force regiment was approved by the DRV in 1966, which was followed by the deployment of enough technical specialists to support a fighter aircraft company. The pilots for this MiG-17 company arrived later that year and in 1967 year specialists arrived for a second fighter company. It is estimated that 87 North Korean air force personnel were deployed to the DRV in that early period of 1967-69. The North Vietnamese reportedly lost fourteen personnel in the conflict. North Korea's military involvement in the Vietnam War, while limited compared to South Korea's, was a significant decision by the DPRK leadership considering the risks and challenges involved in this deployment.

There is unfortunately no coverage during this period in the FBIC Index and only limited MYRIAD 1.0 and MYRIAD 2.0 coverage for the United States on North Korea during this era, making conclusions based on comparative analysis difficult to draw. Measurement limitations are mostly due to a lack of total trade numbers in North Korea, which is unsurprising given the unreliability or unavailability of most data involving that state. However, we can extrapolate somewhat from sub-index variables in the FBIC that are available in conjunction with the limited American and full Chinese coverage in

MYRIAD 1.0 and 2.0. Considering active Chinese support in all realms for the North Korean regime and the United States' comparable support for their rival South Korea, we should expect high Chinese and low American influence for all sample years in the DPRK. MYRIAD 1.0 and 2.0 depict a substantial disparity between the two during the available comparison years of 1973-75, with American influence marginal and Chinese at very high levels. Considering there were no major changes in these relationships during the Vietnam War era, if MYRIAD 1.0 and 2.0 data were available for the United States in North Korea from 1967-72, it would likely also be at a marginal level. Oddly, MYRIAD 2.0 shows a sharp increase in American influence in North Korea from 1974-75, which doesn't appear to coincide with any notable historical improvement in their already abysmal relations. An examination of the FBIC Index's component variables seems to agree with the general trends of MYRIAD 1.0 and 2.0, although this is only based on more limited data availability and is not precise. Although trade data is unavailable for both China and the United States, the arms trade and mutual IGO membership numbers seem to indicate agreement with our expectations. Arms transfers from the United States to North Korea are non-existent and mutual IGO memberships are low. Chinese arms transfers to North Korea remain substantial during the period, with the bandwidth and dependence levels especially high. While we cannot produce an FBIC Index measurement for this sample, the component variables indicate that if total trade was available, we would observe similar influence trends as seen in MYRIAD 1.0 and 2.0.

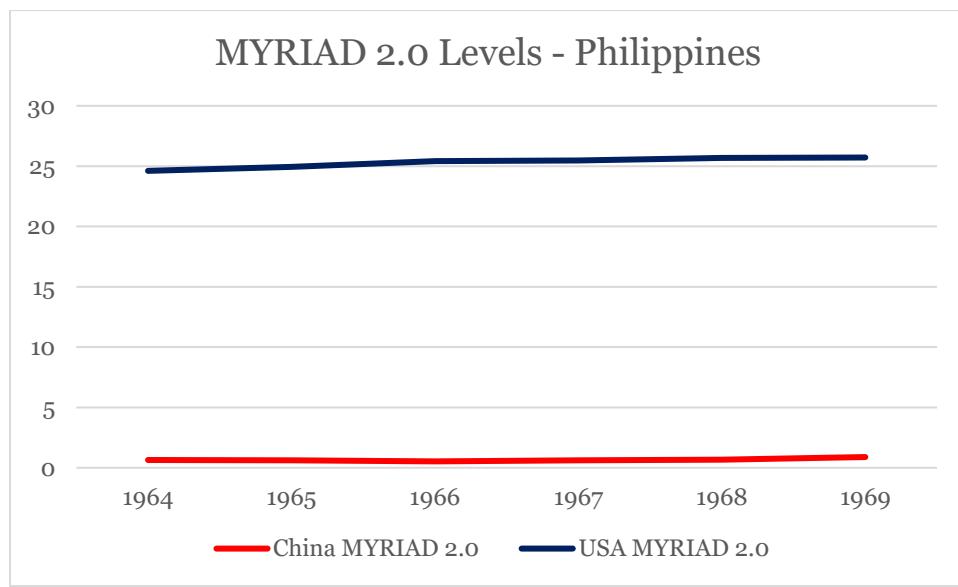
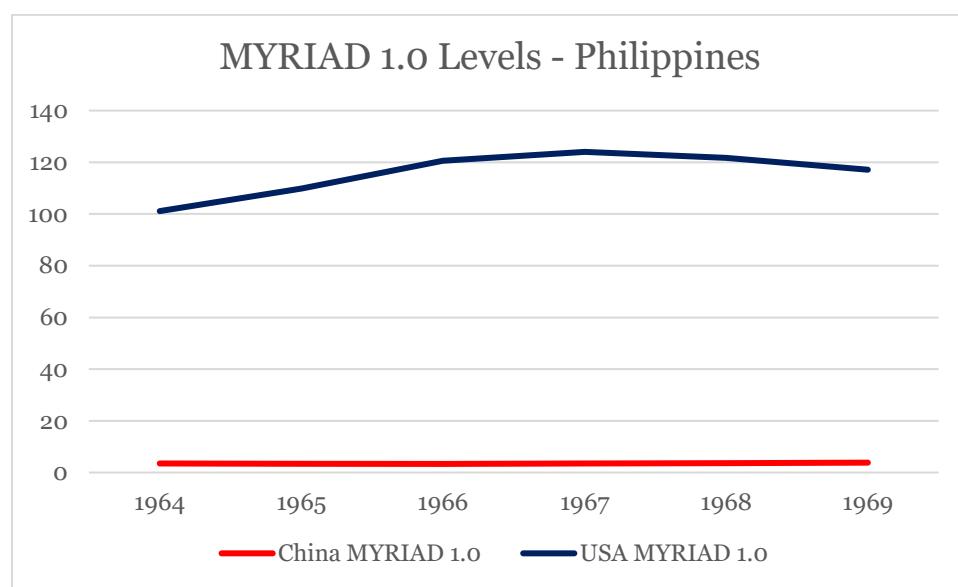
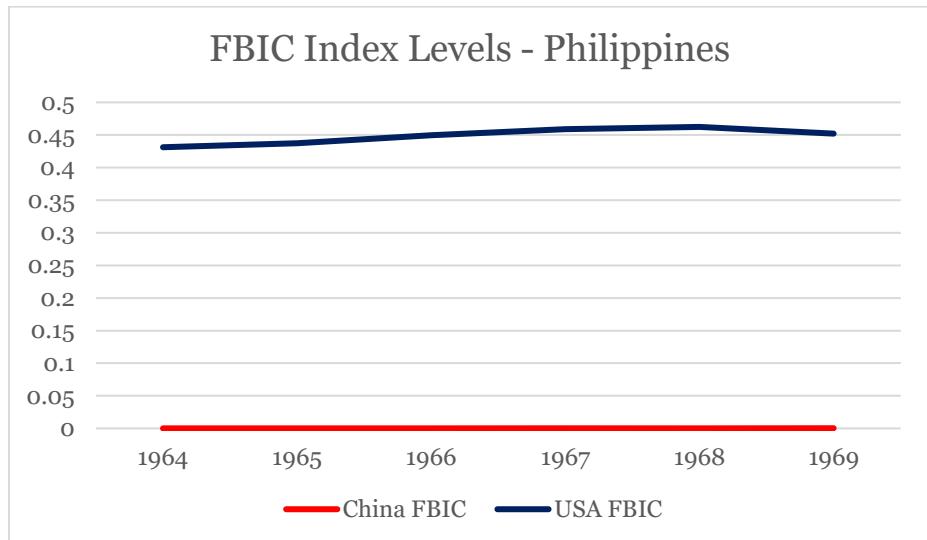


Philippines

The Philippines' long and complex history with the American military entered a new era when in 1964 the state entered into the Vietnam War. After covert Filipino paramilitaries had operated in South Vietnam for many years, believed to be subsidized by the United States, their overt participation involved the deployment of medical, logistics, and psychological warfare teams. Their presence was initially small, so negotiations began to prepare the deployment of a larger support contingency into the conflict zone, although these reinforcements did not arrive until 1966. The total Filipino military contribution to the Vietnam War averaged at slightly more than 2000 individuals, aided in part by American economic grants that financed their presence. The involvement of the Philippines in the conflict ended in 1969, when military dictator Ferdinand Marcos announced the decision to withdraw all Filipino personnel from South Vietnam, abruptly pulling out all but 200 individuals. Some have speculated that this decision was one motivated out of spite, as the American financing of their military activities had been revealed by the US Senate Foreign Relations Committee that same year. The historical situation in the Philippines leads us to hypothesize that American influence will be substantially higher during the years of their involvement as a co-belligerent with South Vietnam, compared with a much lower influence for the opposing Chinese government as a proxy for North Vietnam.

There is maximum coverage for all three measures of influence for China and the United States in the Philippines during the years of their involvement in the Vietnam War. As expected, American influence across all three is substantially higher than Chinese, confirming our hypothesis about this driving their involvement on the side of the United States and South Vietnam. The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all depict marginal levels of Chinese influence over the Philippines throughout the entire period. These levels agree with the historical understanding of Chinese-Filipino relations at the time, which were hostile and kept low by the active presence of the United States in the Philippines. United States influence levels compared to China's in all three indices are comparatively high, as would be expected. Their directionality increases from the 1964-67 period, reaching influence levels considered high by each index's measurement range. The end period of the Philippines' involvement in the conflict shows several differences. The FBIC Index and MYRIAD 1.0 show a slight decline in American-Filipino influence, although the latter's downward slope begins in 1967-68 and FBIC's begins in 1968-69. MYRIAD 2.0 does not have any decrease and maintains its positive slope until the end year of 1969. While the difference between the two is only a year, it is likely that the shorter period of decline depicted in the FBIC Index is more accurate, considering Ferdinand Marcos' decision to withdraw from Vietnam was hastily made and the result of an unexpected event in the US Senate.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to depict the historical context of the Philippines' entry into the Vietnam War on the side of the United States and South Vietnam. Our hypothesis predicting their entry is confirmed by the influence gap presented in all three indices. All of the influence measurements maintain their general directionality trends, with slight differences in the later period of 1967-69. The abrupt shift downward in American influence in the later years depicted by the FBIC Index and MYRIAD 1.0 are likely more accurate in the historical context compared to the continued increase in MYRIAD 2.0. The nature of this decline may be challenged as to whether it was gradual over two years or sudden during one year, but that is a difficult context to extrapolate only based on two years. Regardless, we can conclude that all three measurements have general context validity.

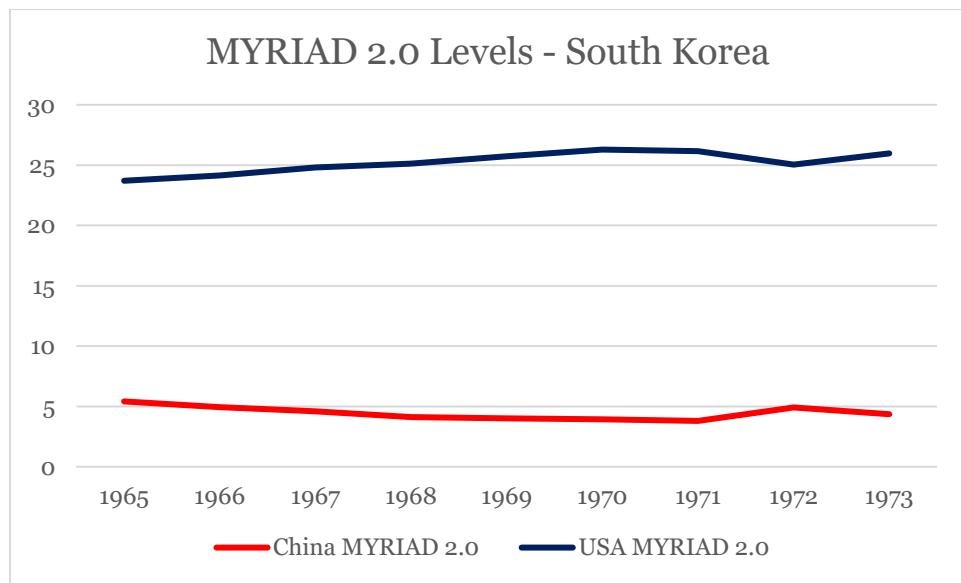
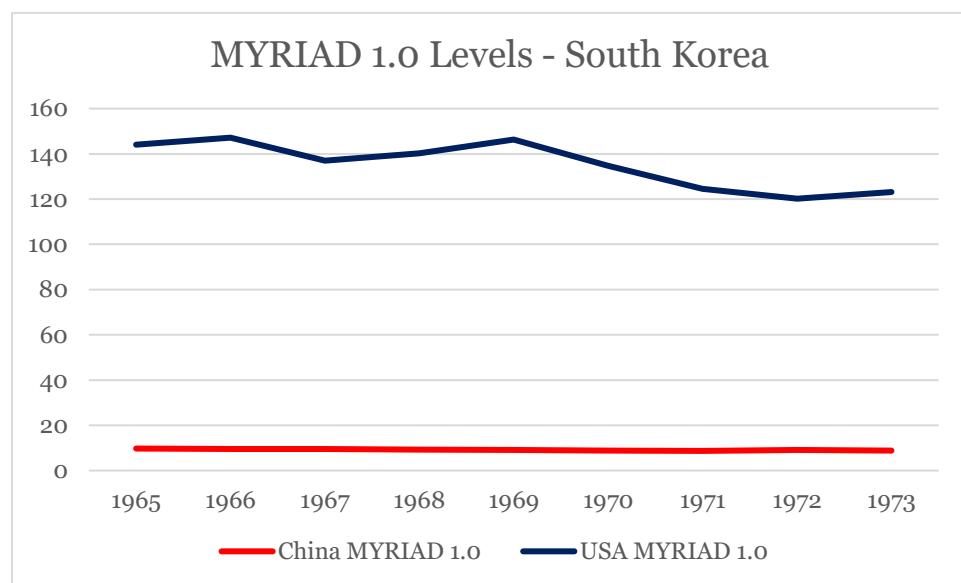
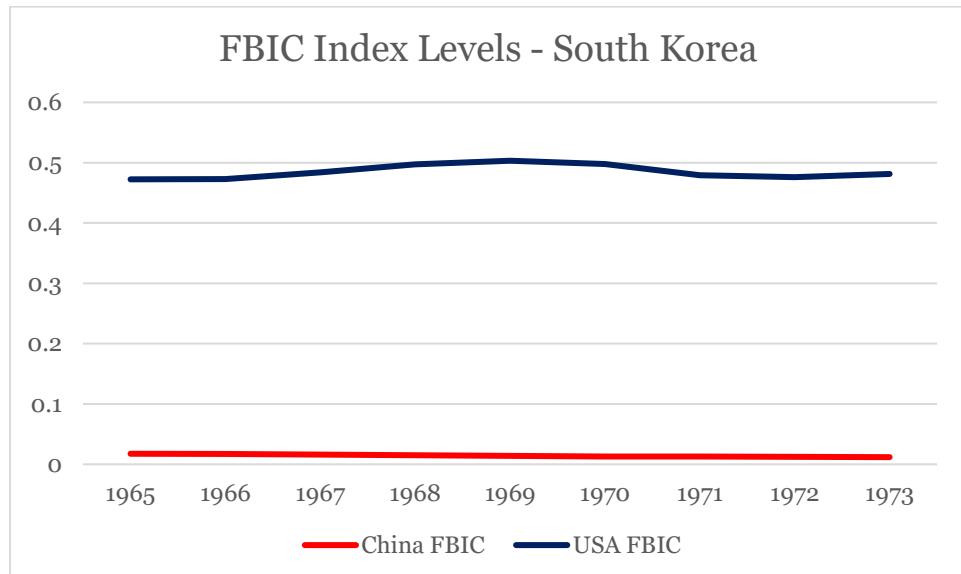


South Korea

Just over ten years removed from their own conflict that in many ways mirrors the Vietnam War, the Republic of South Korea under military dictator Park Chung-hee came to the support of the United States by maintaining a large troop presence in South Vietnam from 1964-73. South Korea was the second largest contributor of forces on the side of the United States, with an approximate yearly total of around 48000 personnel in South Vietnam during the conflict. This contribution was part of US President Lyndon Johnson's "Many Flags" strategy, wherein he sought to make the conflict appear more of an international effort by inviting allied states to act as co-belligerents in Vietnam, as had been done previously in Korea. This opportunity was backed with the incentive for political and economic concessions from the United States at a time when South Korea was highly reliant on them militarily due to the ongoing cease-fire with North Korea. South Korea committed to military involvement in 1964 and the following year initiated their presence with the deployment of several engineer battalions. Regular ROK combat forces arrived to South Vietnam in 1966 and participated in major combat activities alongside the US. When the US began to wind down the conflict in the 1970s, South Korea also started to reduce their troop presence. South Korea had withdrawn from South Vietnam completely by 1973, prior to the signing of the Paris Peace Accords. The historical circumstances of South Korea at the time lead us to hypothesize during the period of their involvement in the Vietnam War, there will be substantially higher American influence in that state compared to China, corresponding with their entry on into the conflict on the side of the US.

There is maximum coverage for all three measures of influence for China and the United States in South Korea during the period of the Vietnam War. The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all agree with the general disparity between the two states during the period that reflects historical accuracy. China in all three maintains minimal influence levels, which does not strain credulity, considering their ardent military and economic support for South Korea's communist neighbor: North Korea. The tense situation on the Korean Peninsula plays out well in all three measurements, extending also to the influence of the United States. There is agreement about the relatively high level of influence of the United States over South Korea during the period, reflecting their participation on that side in the Vietnam War as a co-belligerent. The United States during that period also maintained high levels of economic, political, and military connections to South Korea, including a sizable American troop presence within the state. The general American influence trends, while all high compared to China's, do seem to have differences in direction over time that merit addressing. The FBIC Index and MYRIAD 2.0 show a general upward trend in US-ROK relations from 1965-69, while MYRIAD 1.0 depicts a decline in 1967. All three show a general decline toward the end of the period with an uptick in influence in 1973, although the degree of these shifts varies a bit.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to portray the historical context of South Korea's entry into the Vietnam War on the side of the United States and South Vietnam. Our hypothesis predicting this entry is confirmed by all three indices. General directionality changes seem to cohere across measurements, with the exception of exact years and the USA-ROK influence dip in 1967 for MYRIAD 1.0. There appears to be no major context supporting that shift, so it may be that a data change for the year created that divergence from the agreed positive slope in the other two measurements. We can conclude that all three measurements have concept validity in the case of South Korea during the Vietnam War, although the FBIC Index and MYRIAD 2.0 appear to more closely represent expected trends for American influence.



Soviet Union

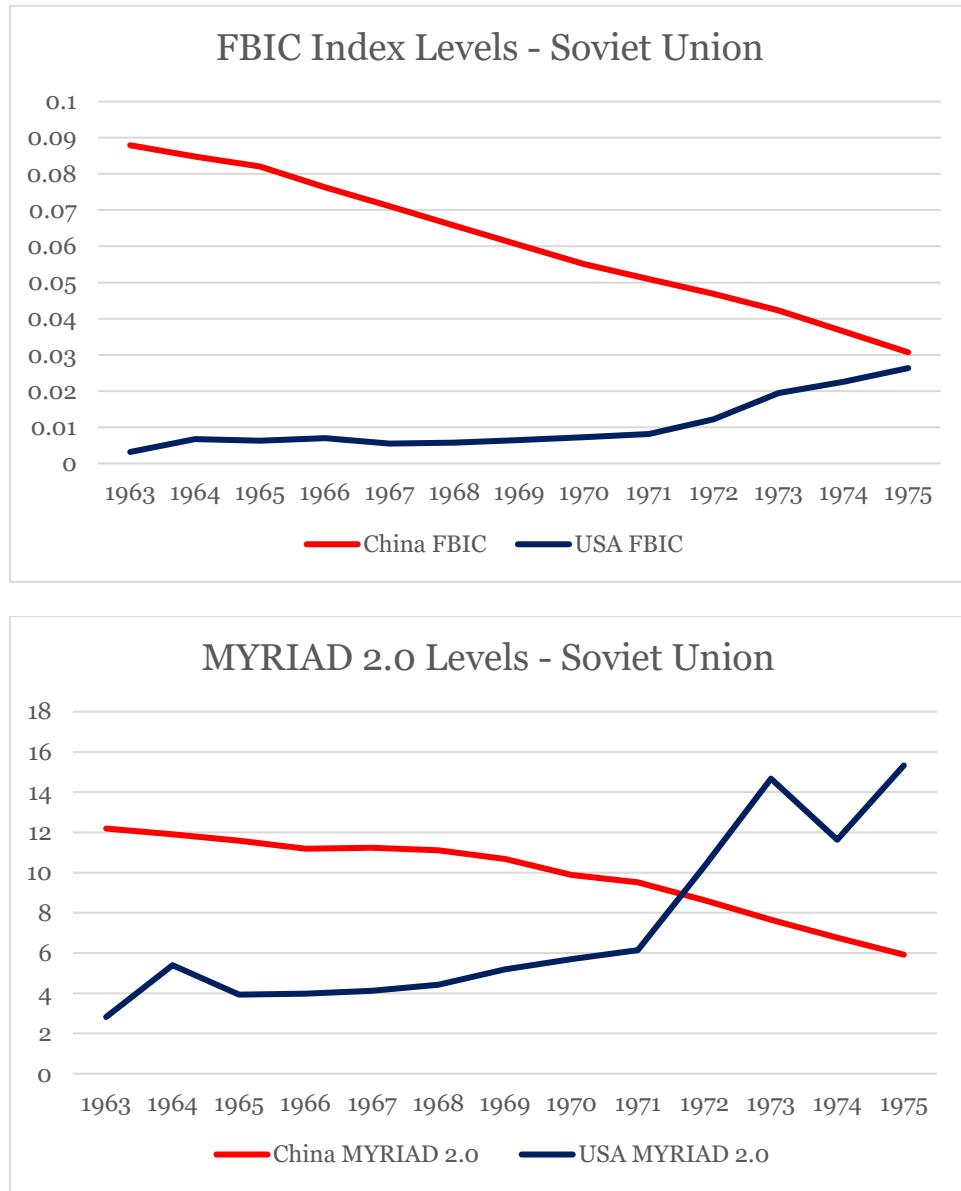
As expected from the leader of the communist world, the USSR actively supported North Vietnamese communists from the early years of their independence movement. They began by initially transferring large amounts of sophisticated military equipment to the DRV, including radar-guided surface-to-air missile (SAM) installations and fighter aircraft like MiG-21s. Along with these weapon systems came a contingent of Soviet technical and training advisors that would instruct the nascent North Vietnamese military. It is also highly probable that Soviet intelligence operatives were scattered throughout the DRV as combat and political advisors. The presence of Soviet technicians and shipping vessels served as an important deterrent to American military action against the DRV, with President Lyndon Johnson ordering bombers not to attack SAM sites that were visibly still under construction, for fear of killing Soviet advisors. The Americans also avoided DRV ports that had Soviet marine vessels docked at them, although there were incidents where they were fired upon during air offensives. Despite the onset of the Sino-Soviet Split in 1960, an ideological conflict between the Chinese and Soviets that had far-reaching consequences for decades to come, the two still maintained cooperation in Indochina to support the North Vietnamese. The historical circumstances in the Soviet Union lead us to hypothesize that China will have higher levels of influence compared to the United States.

There is maximum coverage for the FBIC Index and MYRIAD 2.0 measures of influence for China and the United States in the Soviet Union during the period of the Vietnam War. However, the lack of Soviet Union data in MYRIAD 1.0 makes comparison for either state within that one unavailable. As expected coming out of the Cuban Missile Crisis, the United States maintains a relatively low level of influence over the Soviet Union in both measurements, with a small spike in 1964 followed by a general plateau into 1971. The period of 1971-73 depicts an increase in influence, which likely coincides with the beginning of Nixon's "détente" policy beginning in 1969. However, the FBIC Index and MYRIAD 2.0 have differences in the 1973-75 period. The FBIC Index depicts a gradual climb, eventually resting at the end of the temporal range at a sample high of just under 0.03. MYRIAD 2.0 depicts a sharp 3 point dip in 1973-74, followed by another sharp increase from 1974-75. Nothing of historical context occurred in 1973 that would have explained that decrease and it was in fact a period of unprecedented cooperation between the two states in the Cold War era. This sharp decrease is likely generated by a data issue and perhaps the upward slope in 1973 should have continued to increase slightly to connect to the high in 1975, similar to what is observed in the FBIC Index slope.

This period for Chinese-Soviet relations was also one of great change. The Sino-Soviet Split tore the communist world apart when Mao Tse-tung accused Nikita Khrushchev of revisionism and the two states severed ties. As we would expect, both the FBIC Index and MYRIAD 2.0 depict this gradual worsening of relations from 1963-75, with both measurements trending downward for the entire temporal period. The Sino-Soviet Split continued into the late-1980s, so the continuous decline in influence for both measurements matches expectations given the historical context. An interesting area of disagreement involves when the United States overtakes China with influence in the Soviet Union. The FBIC Index marks this overtake year as being in 1976, while MYRIAD 2.0 sets it between the years 1971-72. Through an examination of the historical events in those years, it is more likely that 1976 is the accurate year that the United States overtook China in the Soviet Union. The Helsinki Accords were signed in 1975, which was considered a high point in East-West relations within Europe, so it would not be unusual to see increased American-Soviet relations the following year. The increase we see in the MYRIAD 2.0 in 1972 for the United States in the USSR should also perhaps be less pronounced, because that was the year that Richard Nixon made his famous trip to China and was received by Mao, an event that angered the Soviet leadership greatly. Considering the mix of events during this crucial period in Cold War history, it is more likely that trends depicted by the FBIC Index are more reflective of the actual influence positions during those years. We can conclude that while both the FBIC Index and MYRIAD 2.0 reflect the historical relations between the United States, China, and the Soviet Union during that period as far as general trends, the overlap period more likely coming after Helsinki points to FBIC having greater concept validity than MYRIAD 2.0 in this case.

The FBIC Index and MYRIAD 2.0 appear to accurately portray the historical relations between China, the United States, and the Soviet Union during the period of the Vietnam War. Despite the decline of Chinese and the rise of American influence in the USSR, the level disparity in 1963 when the Soviets entered the conflict reflect accurately their decision to support North Vietnam and China. While there appear to be disagreements about the exact year when American influence

overcomes Chinese, the general trends are comparable and fit within the context of their actual relations. Unfortunately, MYRIAD 1.0 is unable to be calculated for this case due to lack of data, which may have informed our comparison better. We can conclude that both measurements of influence have concept validity in the case of the Soviet Union's participation in the Vietnam War, although our analysis of the overlap years appear to favor the FBIC Index compared to MYRIAD 2.0.

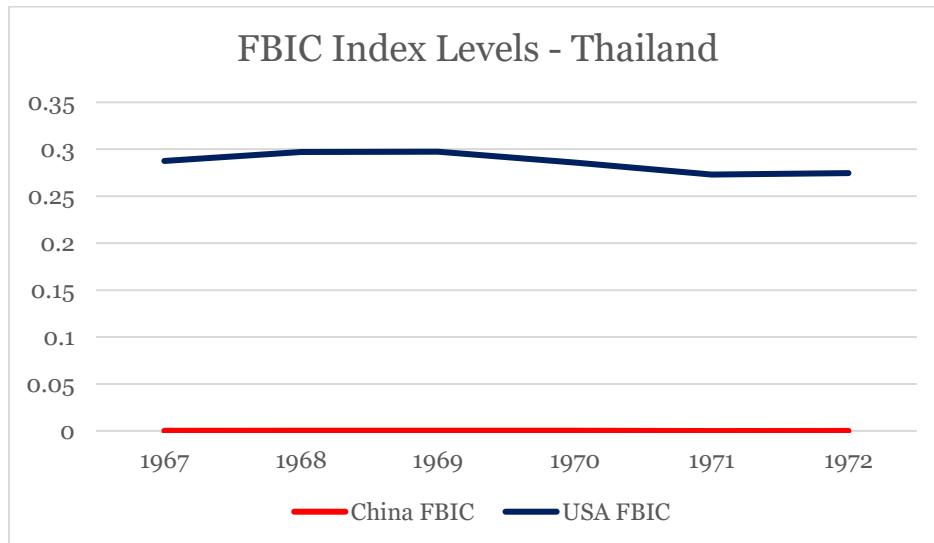


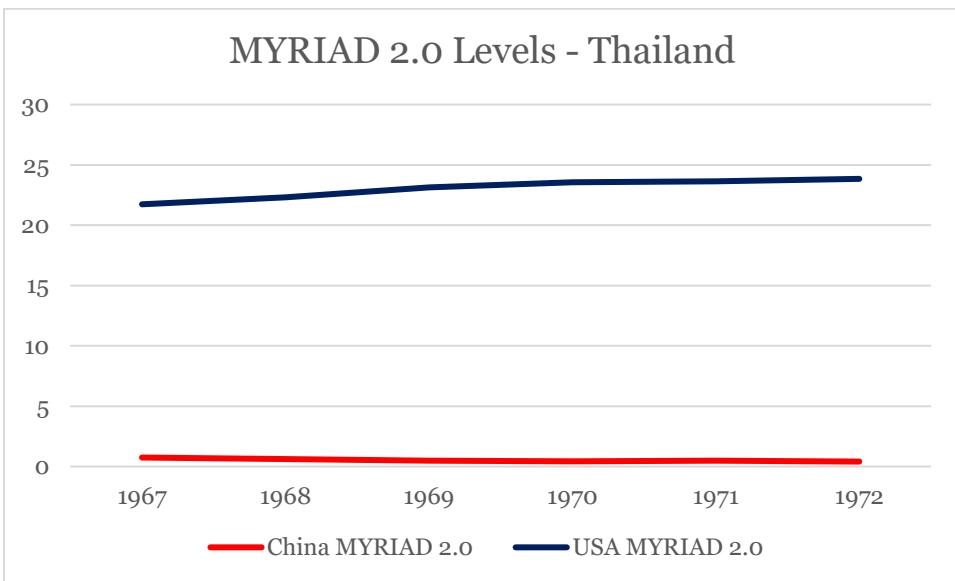
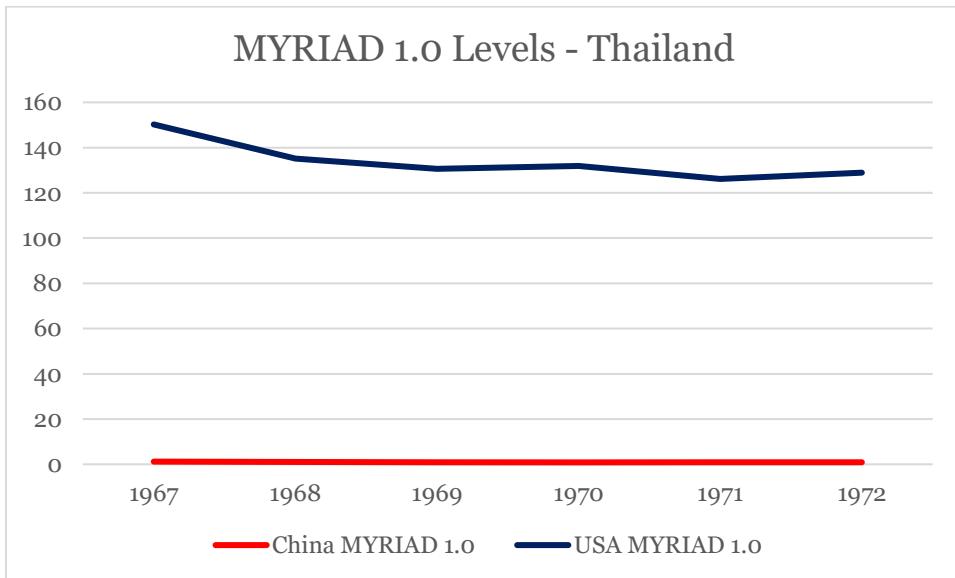
Thailand

The Kingdom of Thailand entered the Vietnam War in 1967 on the side of the United States. Their aim was helping to isolate the spread of communism in Indochina, an especially important development considering their geographic location and ardent anti-communist position. Although they did not fully enter the conflict immediately when the United States escalated it in 1963, they did initially permit the US to utilize their military bases, including as staging grounds for their expansive bombing campaigns. Finally in 1967, at the request of South Vietnam and the US, Thailand deployed a regiment of active duty troops to act as combat participants. Around 40,000 Thai military personnel would serve within South Vietnam during the conflict, the second highest international contingent on the side of the United States next to South Korea. Thailand withdrew their combat forces completely by 1972, just prior to the initiation of the Paris Peace Accords. The historical circumstances of Thailand's involvement in the Vietnam War leads us to hypothesize that the influence levels of the United States will be substantially higher than China's, corresponding with their role as a co-belligerent in the conflict on the side of South Vietnam.

There is maximum coverage for all three measures of influence for China and the United States in Thailand during the period of the Vietnam War. The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all concur that China throughout the sample temporal period maintained a very marginal level of influence over Thailand. These levels cohere with our understanding of the historical context of China's difficulties with Thailand during the Cold War period. The three indices also agree that the United States consistently maintained a much higher level of influence over Thailand compared to China, remaining substantial for the entire period. However, there are discrepancies in the directionality of the United States' influence over time in Thailand. The FBIC Index and MYRIAD 2.0 depict a growth of influence from 1967-69, while MYRIAD 2.0 begins at a higher rate and trends downward. Both the FBIC Index and MYRIAD 1.0 in the 1969-71 period observe slight declines before a brief increase in the 1971-72 year. MYRAID 2.0 differs in that the United States' influence over Thailand remains in a growth pattern every year. It would appear based on comparison that the FBIC Index and MYRIAD 1.0 have similar downward and gradual trends, while the MYRIAD 2.0 depicts the opposite. The initial increase depicted by the FBIC Index is likely closer to historical accuracy, because we can expect a growth in influence after Thailand and the United States entered the conflict as co-belligerents, rather than a drop after that occurs.

The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 all appear to accurately portray the historical condition of America's greater influence over Thailand compared to China during the Vietnam War. This advantage accurately predicts Thailand's entry into the conflict as a co-belligerent of the United States and South Vietnam, confirming our theoretical hypotheses in all cases. We can conclude that all three measures have concept validity in the case of Thailand's participation in the Vietnam War, although the trends support greater accuracy drawn from the FBIC Index compared to both MYRIAD indices.





Conclusions

This study has examined the concept validity of the FBIC, MYRIAD 1.0, and MYRIAD 2.0 indices as they apply to belligerent coalitions formed during the historical period of the Vietnam War (1963-75). Descriptive analyses of trends, directionality, and comparative levels of influence for China and the United States were applied to each state that participated militarily in the conflict between North and South Vietnam. We hypothesized that the United States' influence would be higher than China's if that state entered on the side of South Vietnam. Conversely, China's influence would be higher than the United States' if that state entered on the side of North Vietnam. These theoretical propositions were examined by first developing historical case studies of each state that was militarily involved in the Vietnam War, to provide context to their involvement and any changes in their engagement over time. The FBIC Index, MYRIAD 1.0, and MYRIAD 2.0 output for China and the United States were presented for each state and analyzed for similarities and differences. Any differences of note were discussed and conclusions reached about which was likely more reflective of the actual conditions. Each case was then summarized as to how well the influence indices performed according to our theoretical expectations and in line with the historical situation as it occurred. While each indices comparison differed in ways that cannot be summarized in a general sense, there were some overall trends in performance that can be summarized. It appeared in the cases as a whole that the FBIC and MYRIAD 1.0 reflected trends more accurately according to history than did the MYRIAD 2.0. The smoothed shifts of the FBIC and MYRIAD 2.0 differed from the sudden changes of the MYRAID 1.0 from year to year. We can conclude that in line with historical context and theoretical expectations, the FBIC Index and MYRIAD 1.0 performed best, although the gradualism of changes over time was noticeably different between the two.

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