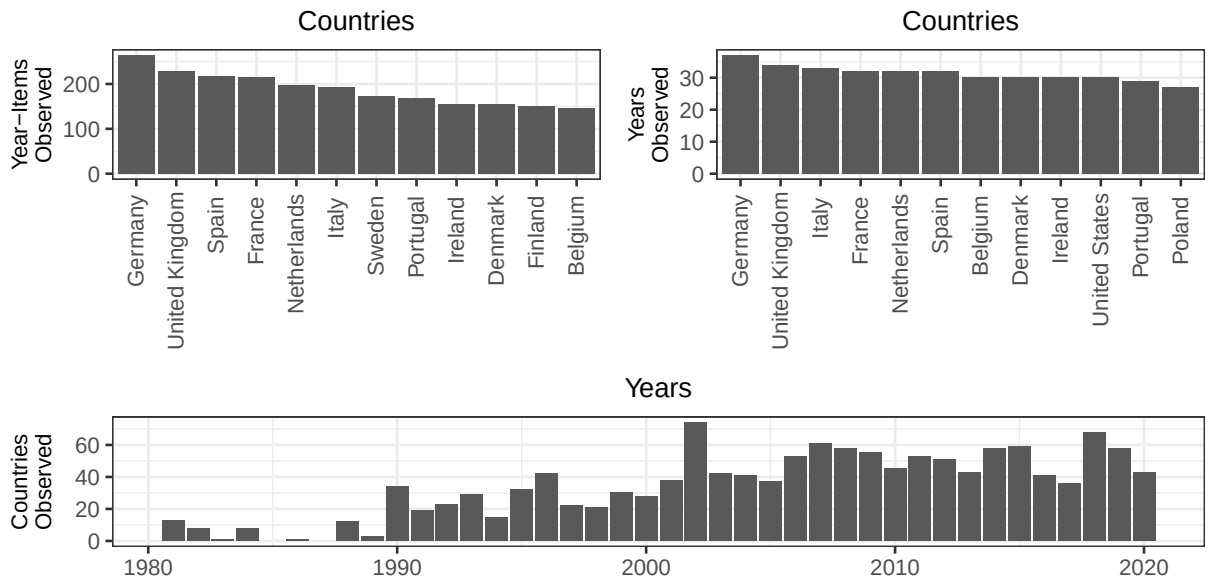

Figure 1: Countries and Years with the Most Observations in the Immigration Opinions Source Data

In this letter, we present the Immigration dataset, which is based on the host of survey data available and recent advances in latent variable modeling of public opinion that allow us to make use of this sparse and incomparable data. It provides comparable estimates of the public's attitudes on immigration across countries and over time. We show that these scores are strongly correlated with responses to single survey items as well as with measures XXX. We expect that the XX data will become an invaluable source for broadly cross-national and longitudinal research on the causes and effects of collective attitudes toward immigrants and immigration.

Examining the Source Data on Immigration Attitudes

National and cross-national surveys have often included questions tapping attitudes toward immigration over the past four decades, but the resulting data are both sparse, that is, unavailable for many countries and years, and incomparable, generated by many different survey items. In all, we identified 105 such survey items that were asked in no fewer than five country-years in countries surveyed at least twice; these items were drawn from 135 different survey datasets.[1] Together, the

[1]The complete list of immigration survey items is included in online Appendix A.

survey items in the source data were asked in 117 different countries in at least two time points over 39 years, from 1981 to 2020, yielding a total of 5,991 country-year-item observations. Observations for every year in each country surveyed would number 4,563, and a complete set of country-year-items would encompass 479,115 observations. Viewed from this complete-data perspective, the available data can be seen to be very, very sparse. From a more optimistic standpoint, we note there there are 1,355 country-years in which we have at least *some* information about the immigration attitudes of the population, that is, some 50% of the 2,707 country-years spanned by the data we collected.

The upper left panel of Figure 1 shows the dozen countries with the highest count of country-year-item observations. Germany, with 264 observations, is the best represented country in the source data, followed by United Kingdom, Spain, France, and Netherlands. At the other end of the spectrum, three countries—Bahrain, Belize, and Sudan—have only the minimum two observations required to be included in the source dataset at all. The upper left panel shows the twelve countries with the most years observed; this group is similar, but with United States and Poland joining the list and Sweden and Finland dropping off. The bottom panel counts the countries observed in each year and reveals just how few relevant survey items were asked before 1990. Country coverage reached its peak in 2002, when surveys in 74 countries included items on immigration attitudes. In the next section, we describe how we are able to make use of all of this sparse and incomparable survey data to generate the XX scores using a latent variable model.

We used the `DCPO` package for R (**?**) to estimate this model on the public gender egalitarianism source data described above. The dispersion parameters of the survey items indicate that all of them load well on the latent variable (see online Appendix A). The result is estimates, in all 2,702 country-years spanned by the source data, of mean public gender egalitarianism, what we call PGE scores.[2] Figure 2 displays the most recent available PGE score for each of the 117 countries and territories in the dataset.

The Scandinavian countries and France are at the top of this list, along with Puerto Rico, which has had women of both of its major parties serve as chief executive and as recently as 2020 had a

[2]To provide further confirmation of the unidimensionality of public gender egalitarianism, we estimated two separate indices of gender egalitarianism in politics and in the workplace. These indices correlate very highly with the PGE scores and with each other, reinforcing the conclusion that public gender egalitarianism exists as a single dimension across countries and years; see online Appendix C.

Figure 2: PGE Scores, Most Recent Available Year

woman from each party holding the two most prominent elected offices on the island. The latest scores for Libya, Saudi Arabia, Greece, Lebanon, and Sudan have them as the places where public opinion is least favorable to gender equality in the public sphere.

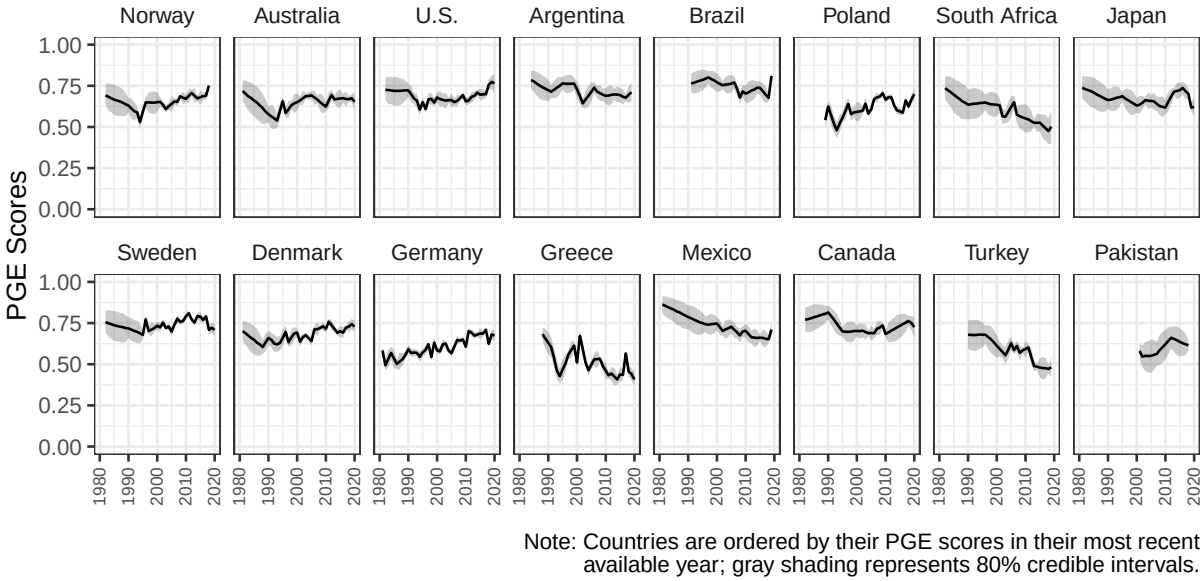

Figure 3: PGE Scores Over Time Within Selected Countries

Figure 3 displays how PGE scores have changed over time in sixteen countries. Like Figure 2, it underscores the geographic breadth of the PGE dataset, which allows the study of countries and regions too often neglected in political science research (see Wilson and Knutsen 2020). The figure also shows that while public opinion favoring gender equality in the public sphere has risen steadily in some countries, such as Norway and Australia, attitudes have changed little over time in others, like South Korea and the Philippines, or fallen, as in Indonesia. They have even advanced and retreated as in Brazil or have declined and recovered as in Nigeria. There is much to do to explain the causes and consequences of these trends in public gender egalitarianism.

Validating Public Gender Egalitarianism

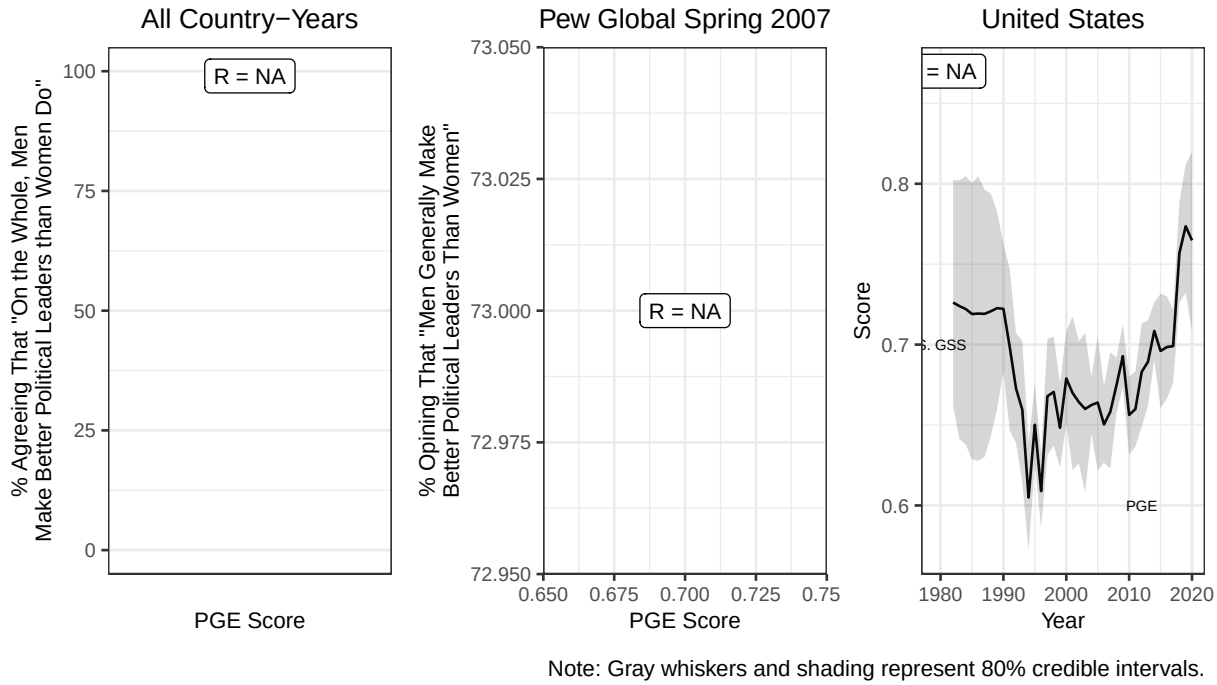

Figure 4: Convergent Validation: Correlations Between PGE Scores and Individual PGE Source Data Survey Items

References

Wilson, Matthew Charles and Carl Henrik Knutsen. 2020. "Geographical Coverage in Political Science Research." *Perspectives on Politics* FirstView:1–16.