

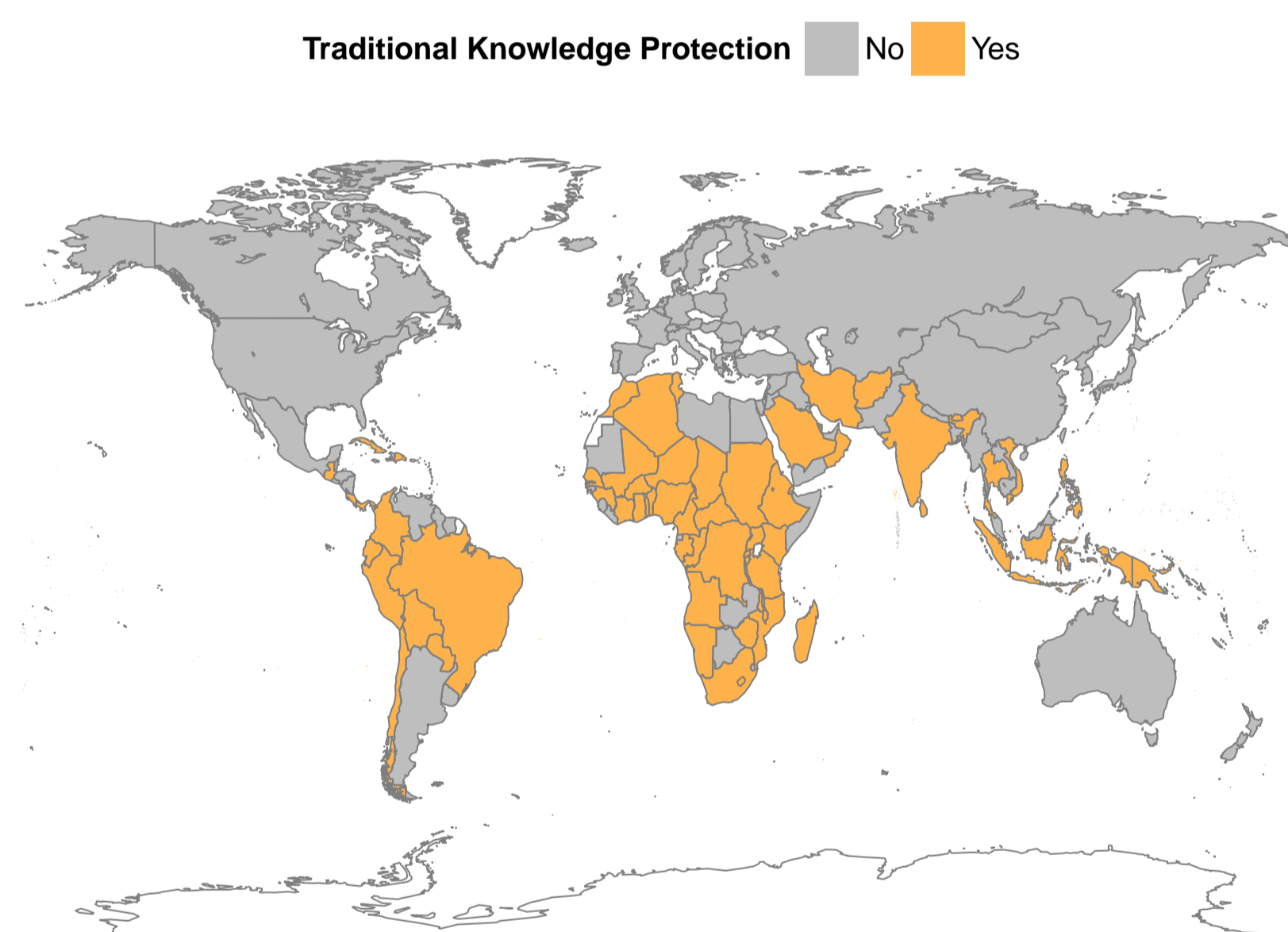
# Who Protects Traditional Knowledge, and Why?

Gabriel J. Michael

## Conclusions

- ▶ Since 1967, **71 countries** have adopted laws explicitly protecting traditional knowledge (TK) or traditional cultural expressions (TCEs).
- ▶ Statistical models suggest **three primary factors** increase the likelihood that a country will protect TK:
  - ▶ The **pre-existing level of diversity** within a country
  - ▶ Whether a country is a member of the **World Trade Organization (WTO)**
  - ▶ Whether a country has a **free trade agreement (FTA)** with the United States
- ▶ I hypothesize that since 1995, **TK protection has spread in reaction to fears of biopiracy or misappropriation**, accelerated by the WTO agreement and FTAs.

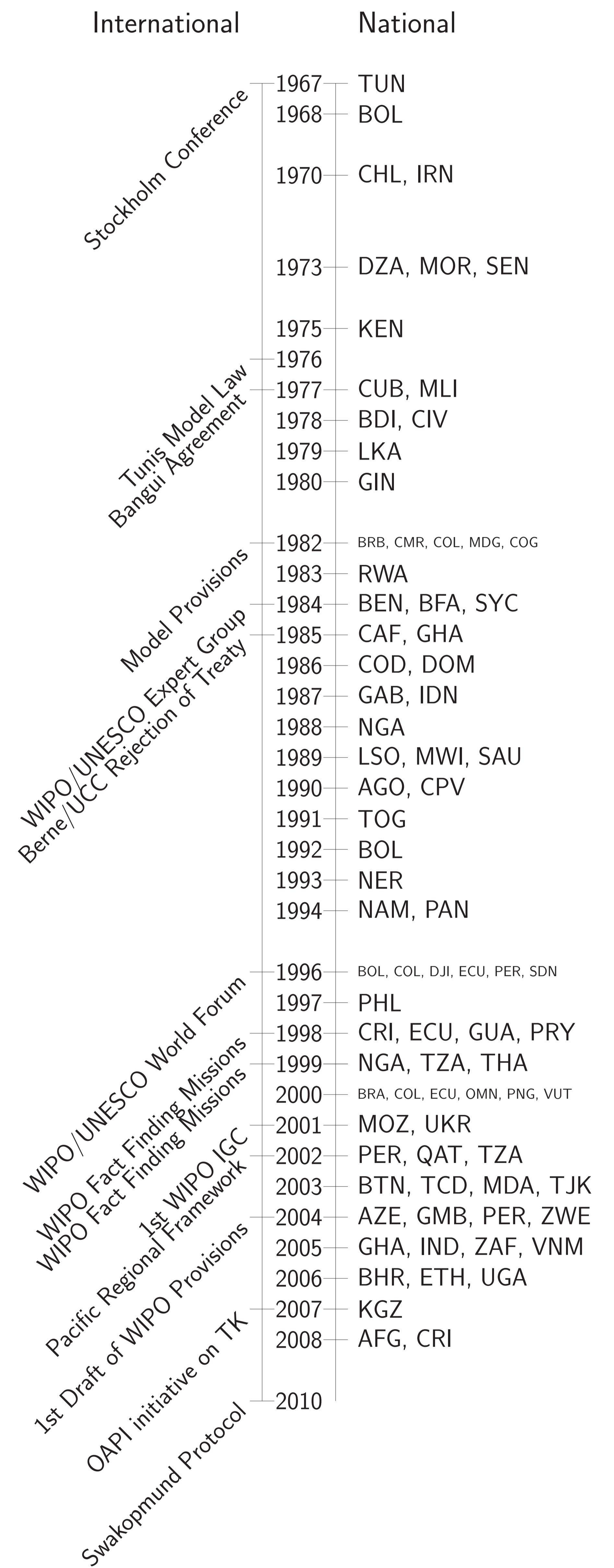
## Which Countries Protect TK?



## Definitions, Data, & Methods

- ▶ Traditional knowledge can include knowledge about the **medicinal uses of plants, skilled artistic practices, local ecological knowledge, and traditional agricultural methods**
- ▶ I consider only TK and TCEs, not genetic resources
- ▶ I gathered data from **WIPO Lex, von Lewinski (2008)**, and several other sources. I read each national law to ensure it contained specific references to TK.
- ▶ I employ survival regression, using a Cox proportional hazards model with time-varying covariates

## When Did Countries Begin Protecting TK?



## Why Do Countries Protect TK?

- ▶ Results indicate that countries with **higher linguistic/cultural/biodiversity** and **lower GDP per capita** are more likely to protect TK.
- ▶ However, **WTO members are twice as likely to protect TK** as non-members, and **countries with a U.S. FTA are 6 times as likely to protect TK** as those without this bilateral relationship.

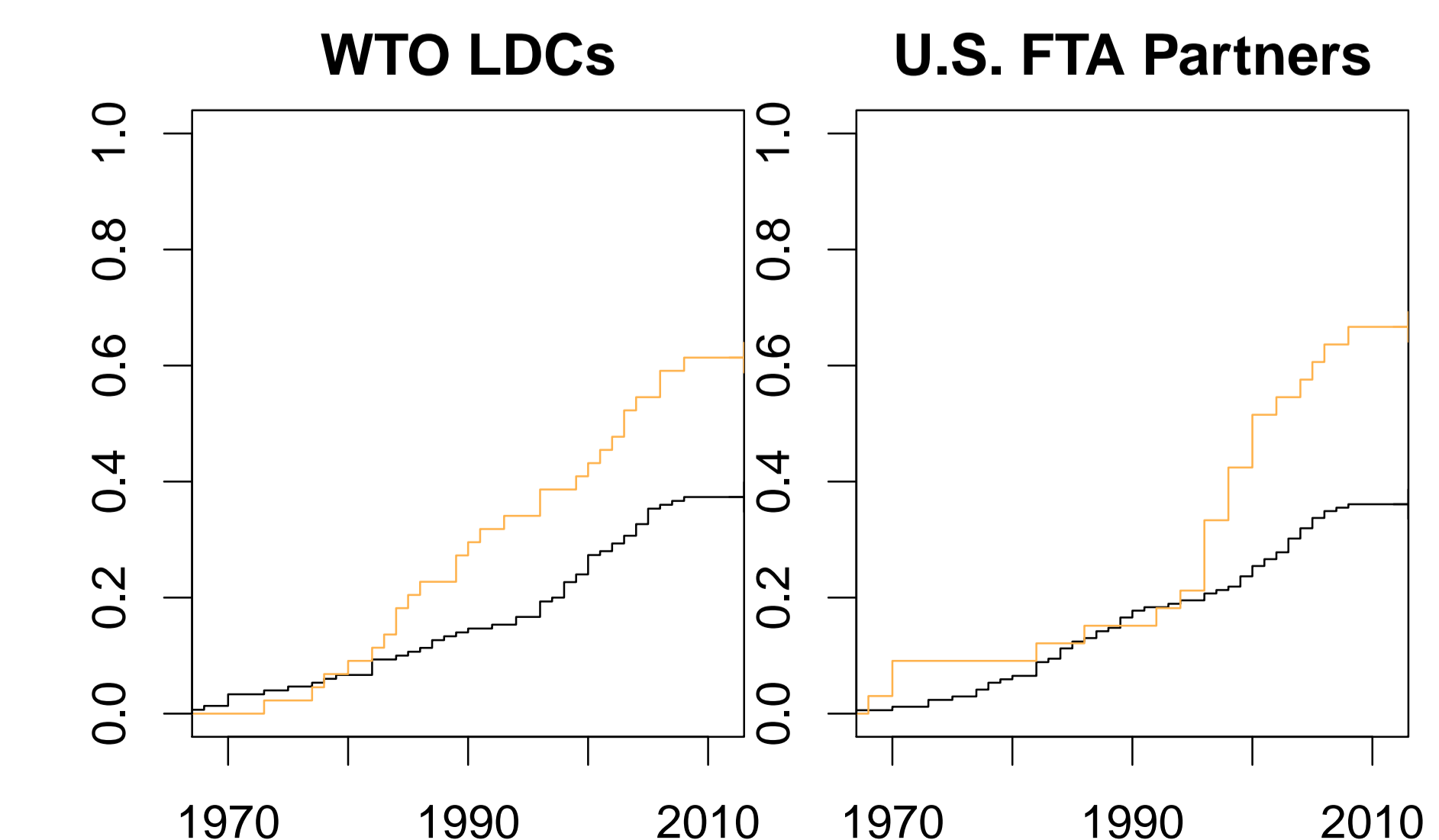
Variable	Hazard
GDP per capita (1000s of USD)**	0.93
Linguistic Diversity*	2.67
WTO Membership*	1.97
FTA with United States***	6.16
Polity IV Score	0.96
FTA with European Union	0.15
WIPO Technical Assistance Missions	1.42
WIPO IGC Meetings Attended	0.64
Post-1945 European Colony	0.92
Recent Independence	1.44
European Colony × Recent Independence	1.19
Nearby Adoptees**	0.69

\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$

- ▶ **Hazard ratios > 1** mean that an **increase in a variable** is associated with an **increased probability** of a country protecting TK.
- ▶ **Hazard ratios < 1** mean that an **increase in a variable** is associated with a **decreased probability** of a country protecting TK.

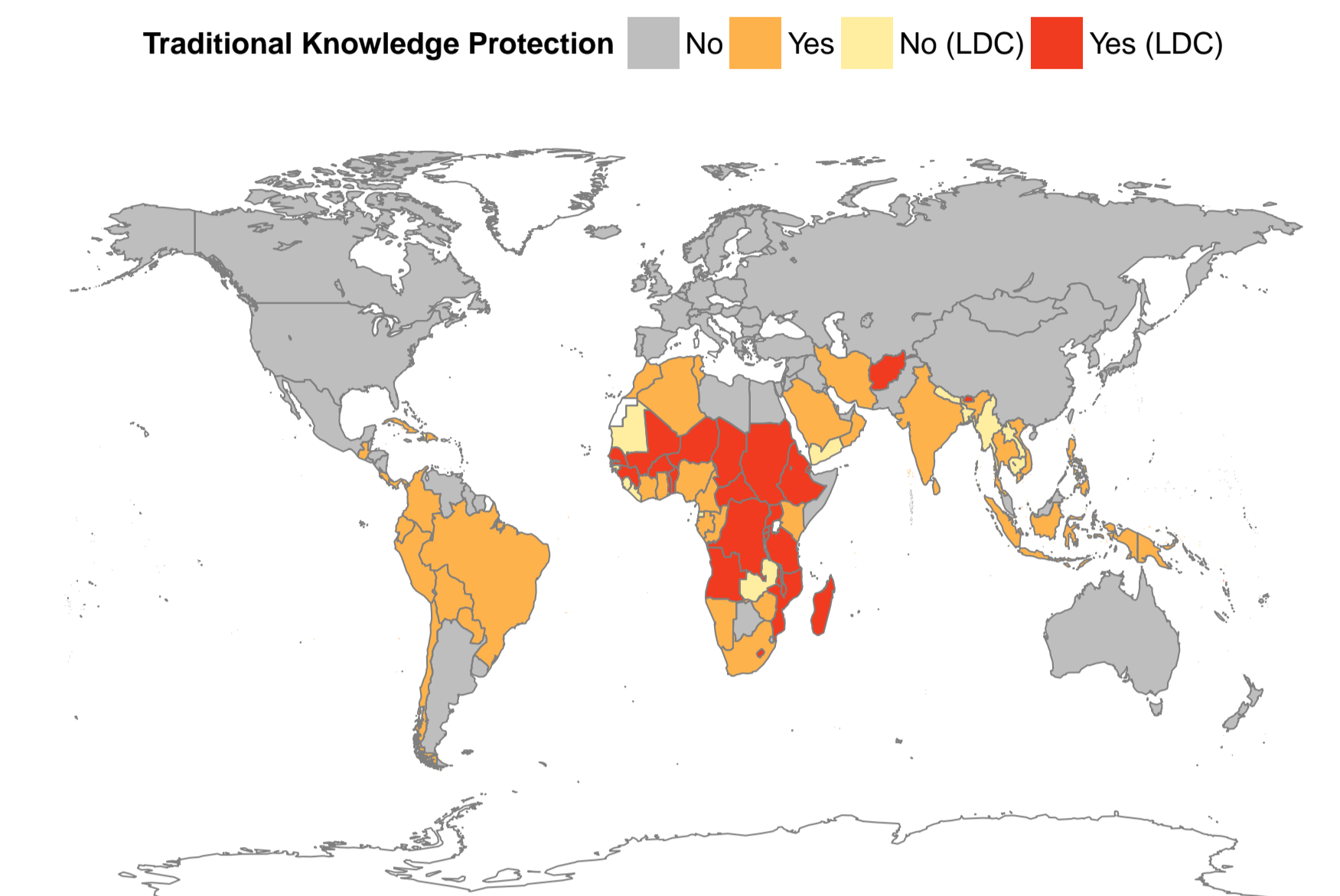
## How is WTO Membership & U.S. FTA Partnership Associated with TK Protection?

These plots show the proportion of countries protecting TK over time. The left graph compares WTO least-developed countries (orange) to non-LDCs. The right graph compares countries with a U.S. FTA (orange) to those without.

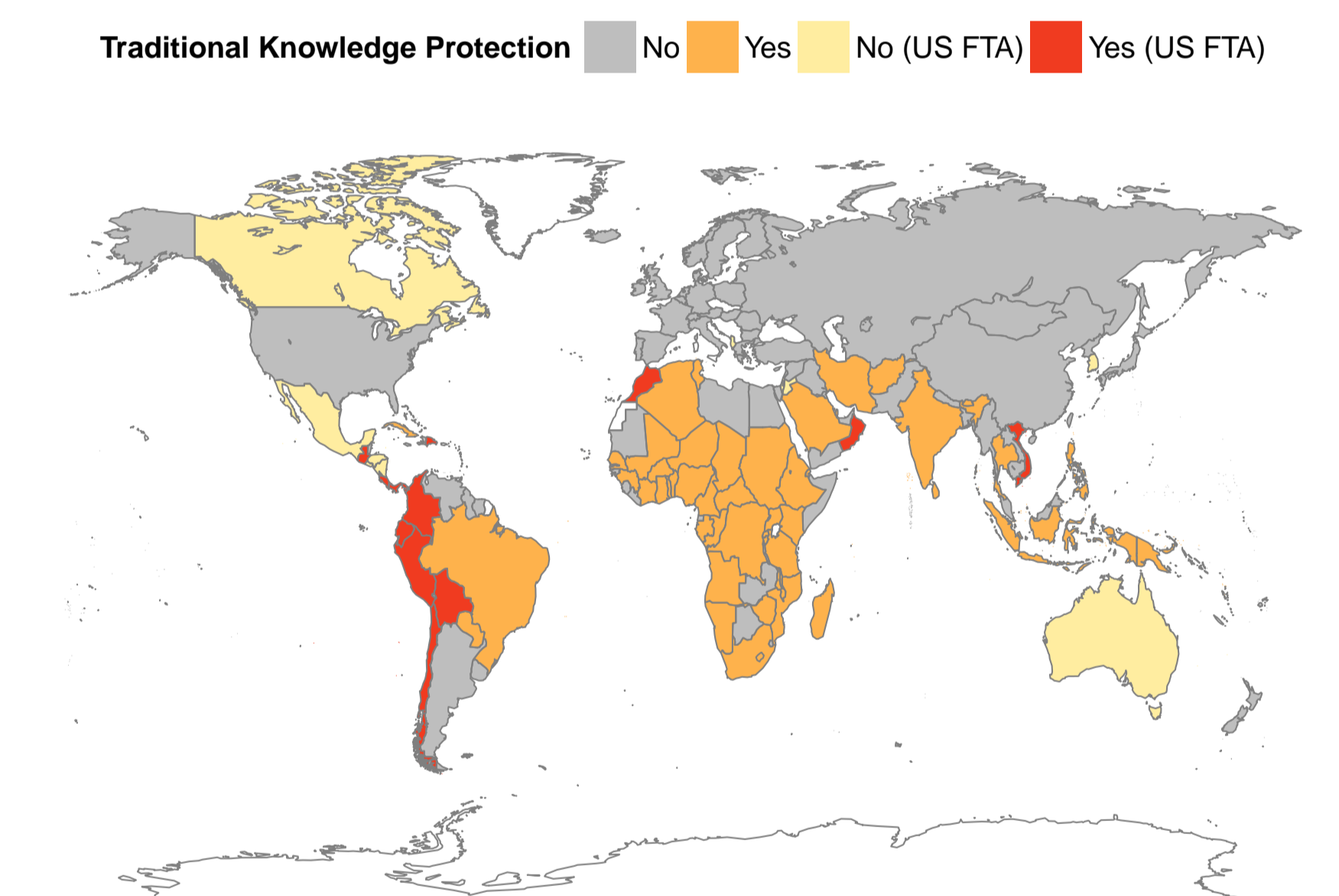


## Mapping WTO LDCs & U.S. FTA Partners

Of the 71 countries protecting TK, 26 are WTO least-developed countries:



Of the 71 countries protecting TK, 13 have free trade agreements with the United States:



## Get Involved!

This poster represents one chapter of my dissertation, which studies the spread of TRIPS-plus intellectual property laws around the world. **You can help with my research!** I would like to interview policymakers, academics, practitioners, and activists with an interest in TK. **Please take a business card** or note my contact information so that we can keep in touch.

## Contact Information

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