



Midwest Agriculture  
Conference

# U.S. Agricultural Land Markets and Foreign Investment

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# Land Markets

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- Drivers of value are unique to the area
- Agricultural productivity should be main determinant
  - Soils
  - Slope
  - Weather patterns
  - Irrigation
- But there are other factors that affect price
  - Recreational demand
  - Urban-suburban expansion
  - Oil and gas
  - Wind and solar

# Current Environment

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- Foreign investment is a very politically charged topic in many states
- Many states are proposing/passing legislation to restrict foreign ownership of farmland
- Some federal legislative proposals are also coming forward
- Great deal of focus on Chinese purchases

AUGUST 02, 2022

**COTTON, TUBERVILLE  
INTRODUCE BILL TO  
PROHIBIT THE CHINESE  
COMMUNIST PARTY FROM  
PURCHASING AMERICAN  
LAND**



MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV INVESTING

POLITICS

**Chinese company's purchase of North Dakota farmland raises national security concerns in Washington**

Forbes

BILLIONAIRES • DAILY COVER

**Why A Secretive Chinese Billionaire Bought  
140,000 Acres Of Land In Texas**

# Background on AFIDA

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- American Foreign Investment Disclosure Act of 1978 (AFIDA)
- AFIDA grants the USDA authority to monitor land acquisitions and record transaction information
  - Name of foreign entity or person
  - Country of residence
  - Parcel acreage
  - Land use (cropland, pasture, forest, other ag land)
  - Purchase price
  - Date of transfer
- Acquisitions can be purchases or leases that are 10 years or more

# Background on AFIDA

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- Failure to comply with AFIDA results in a civil penalty of up to 25% of fair market value of the land
- USDA publishes an annual report of foreign ownership or leasing of U.S. land and the state where the land was acquired
- AFIDA doesn't track commercial or residential acquisitions

Figure 4

County Concentration of Foreign Holdings of Crop Land as of December 31, 2020

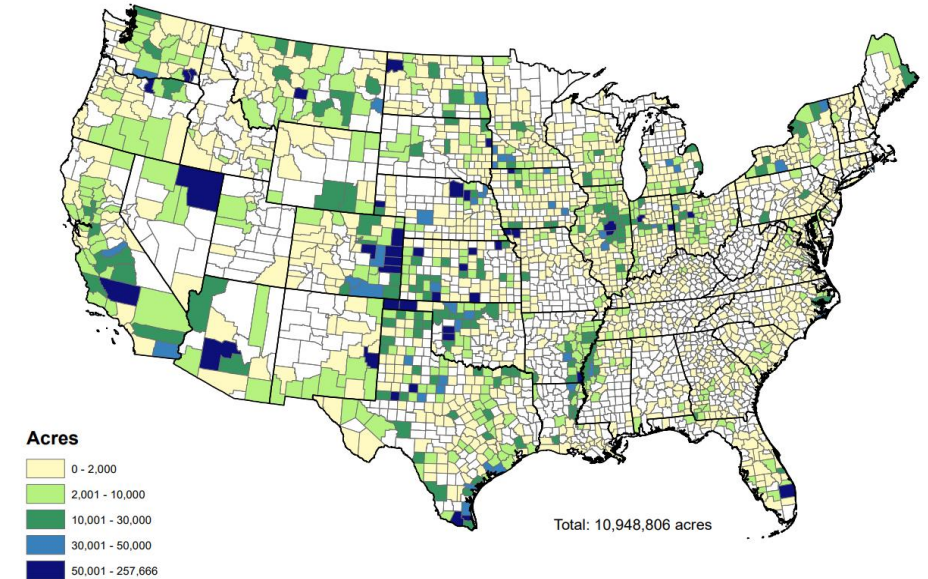
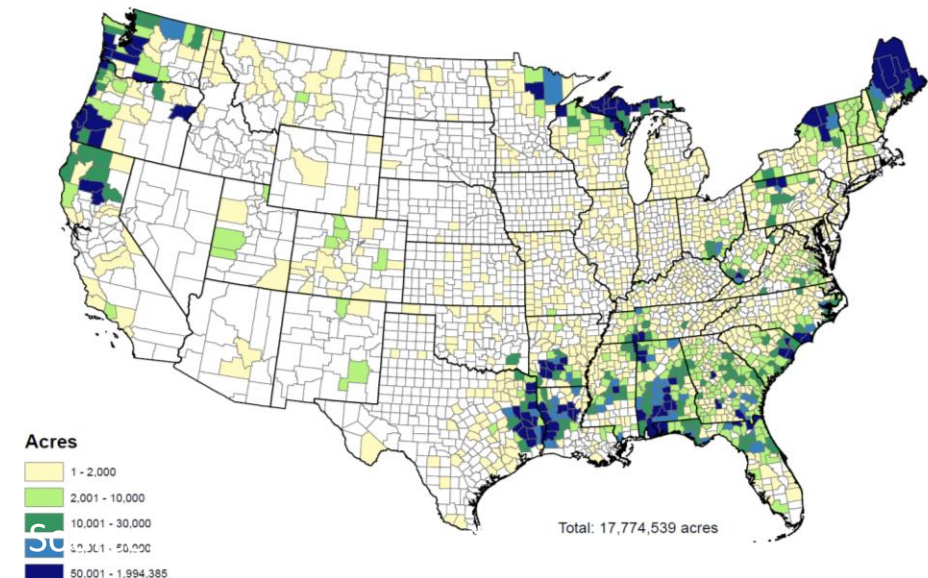


Figure 6

County Concentration of Foreign Holdings of Forest Land as of December 31, 2020



# Current Legislative Activities

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- National Agricultural Law Center at the University of Arkansas
- No federal law prohibits the ownership of private land by foreign persons or entities
  - There is proposals to mandate reporting for leases 5 yrs+ rather than 10 yrs+
- Approximately 24 states have laws that seek to restrict to some degree foreign ownership or investments in private ag land
  - The laws vary widely by state in definitions of “agricultural land” and “farming”, who can buy land, and amount of land that can be bought
- As of 2023, most states have proposed, or have plans to propose, at least one piece of legislation that will prohibit or limit private land ownership by foreign entities in their state

# Data on Foreign Ownership

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- Obtained a copy of the AFIDA database through 2020 used by USDA Farm Service Agency via a Freedom of Information Act request
  - Contains over 40,000 voluntarily reported ownership or long-term leases by foreign owners
- Created tables and maps to help visualize what is going on with foreign acquisitions across space and time

# Top 5 Foreign Landowners

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- Largest U.S. *cropland* holdings by country:

Country	Holdings (acres)
Canada	3,860,595
Italy	1,672,283
Portugal	794,067
Germany	603,871
United Kingdom	601,886

- Largest U.S. *total* holdings by country:

Country	Holdings (acres)
Canada	12,361,087
Netherlands	4,944,700
Italy	2,702,871
United Kingdom	2,329,952
Germany	2,063,406

- Total amount foreign owned or leased land in 2020 was 37.6 million acres, which represents about 2.9% of all privately held U.S. ag land



# Top States with Foreign Ownership

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- U.S. land holdings of agricultural and forest land by foreign investors

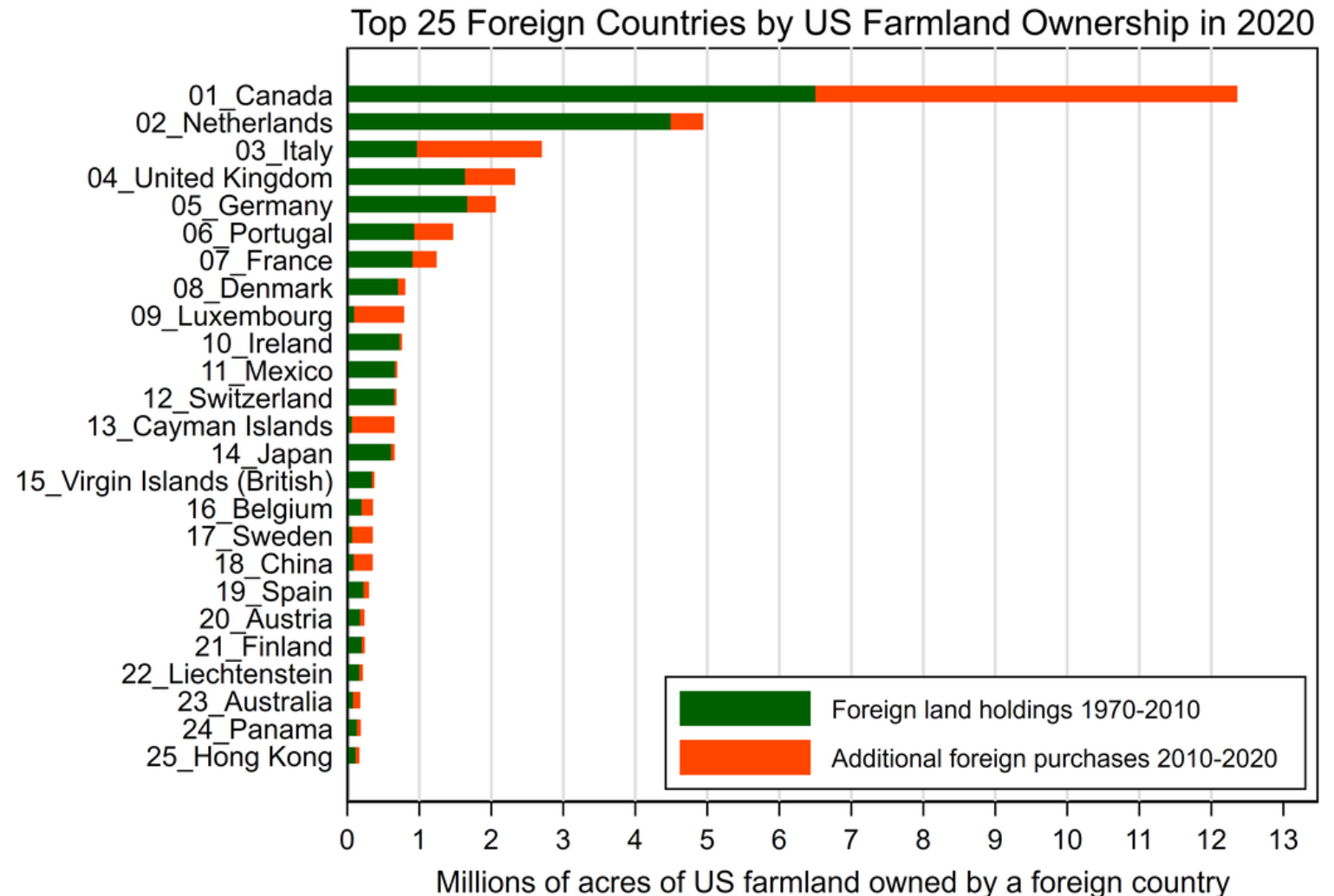
State	Holdings (acres)
Texas	4,806,689
Maine	3,519,099
Alabama	1,809,173
Colorado	1,783,096

- 2020 Agricultural and non-agricultural acquisitions

State	Acquisitions (acres)
Oklahoma	384,022
Texas	360,047
Colorado	286,036
Kansas	200,046

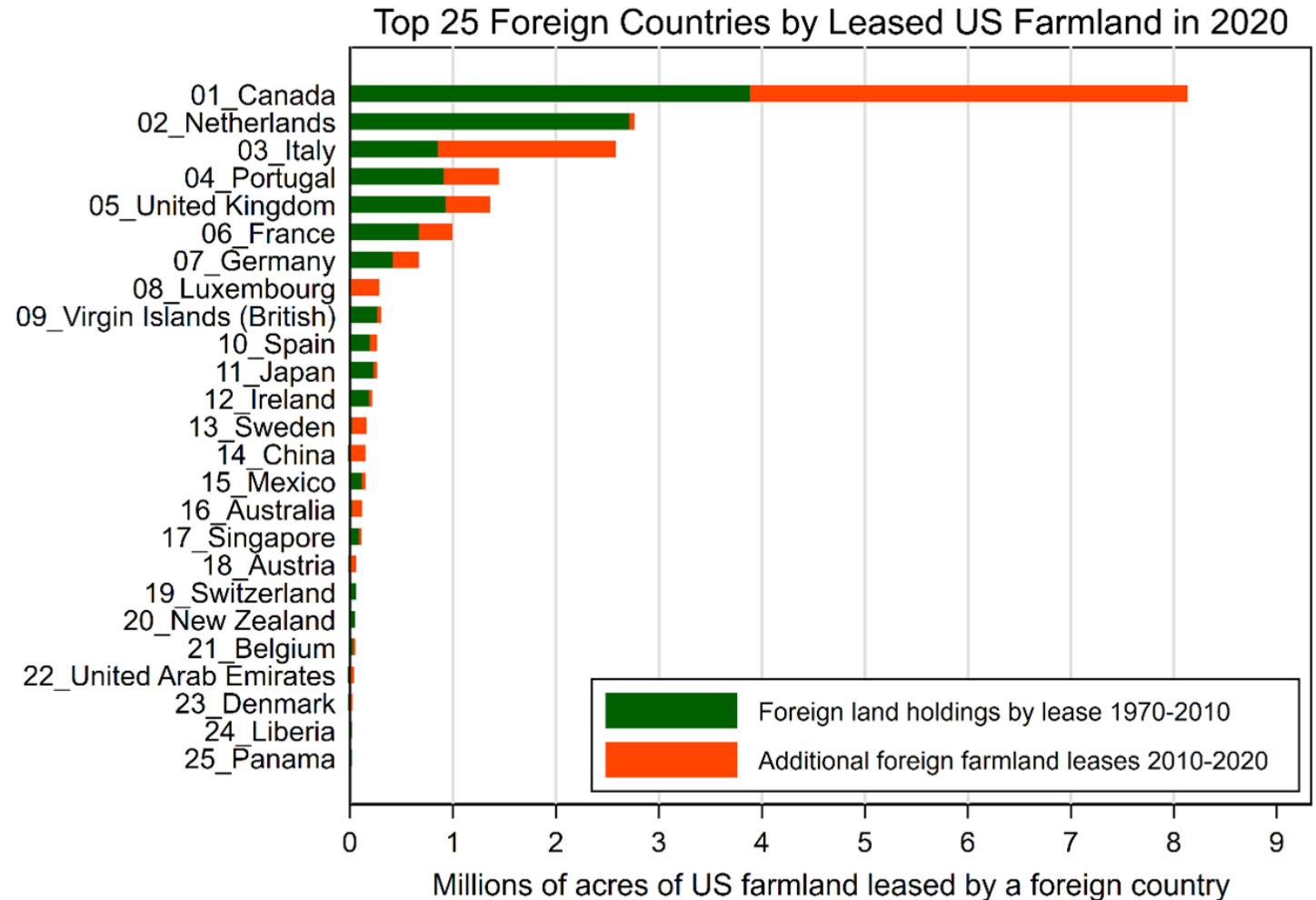
# Top 25 Foreign Owners of U.S. Land

- Canada is the largest owner of U.S. farmland, which includes cropland, pasture, and forest land
- Some countries have bought more recently, while others are long-standing owners
- China is #18



# Top 25 Foreign Holdings of U.S. Land

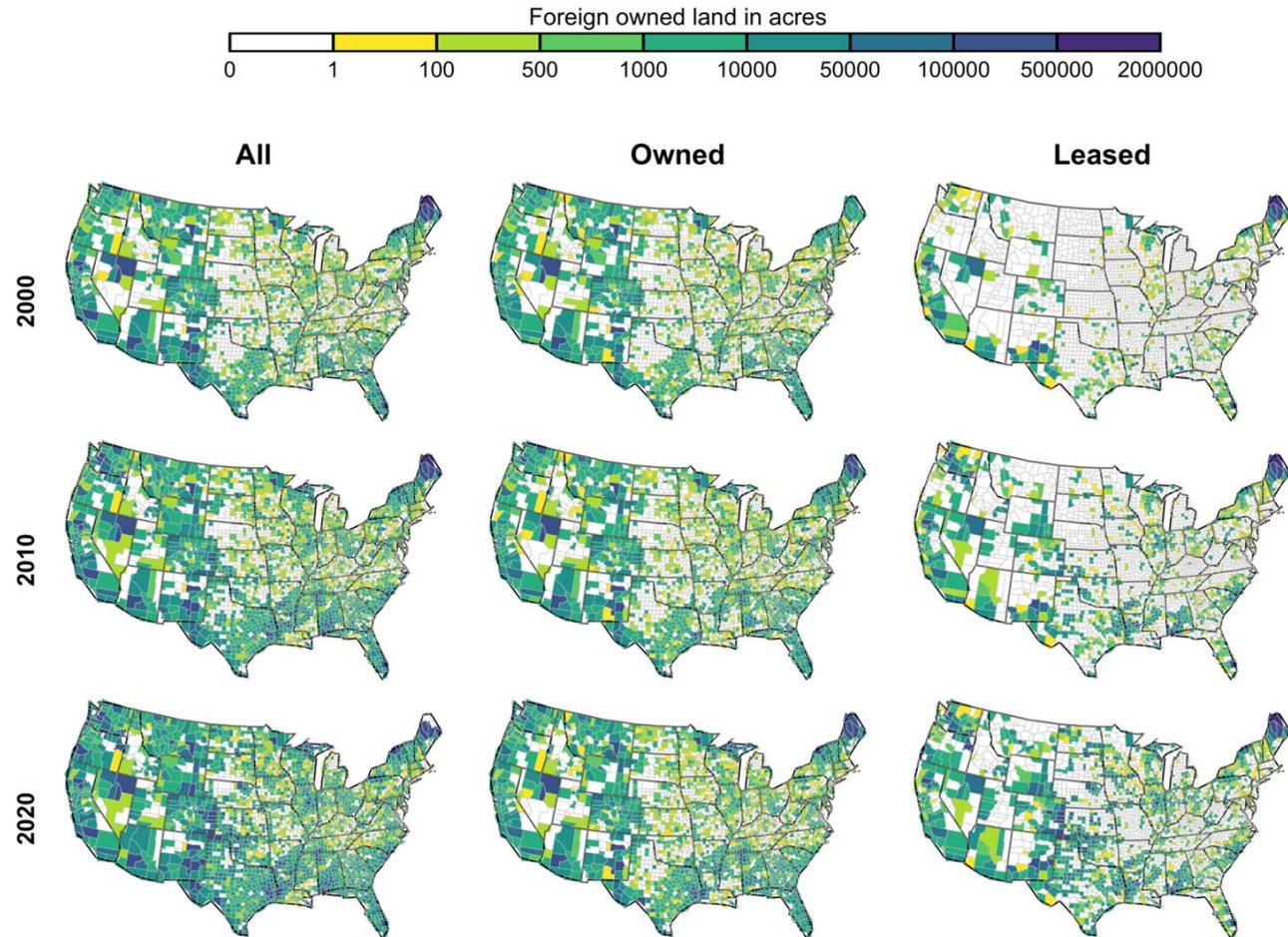
- Canada is also the largest leaseholder of U.S. farmland



# Foreign Owned or Leased Land

Foreign interests in US agricultural land in 2000: 12 mil. acres owned and 0.18 mil. acres leased.

Foreign interests in US agricultural land in 2020: 26 mil. acres owned and 12 mil. acres leased.

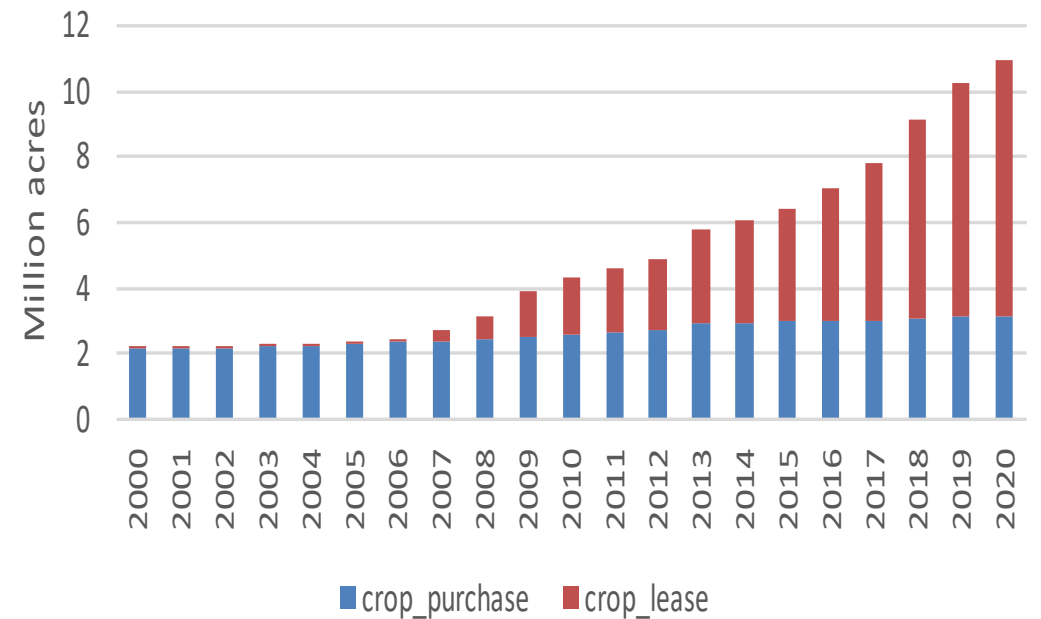


# Foreign Owned or Leased Land

Cumulative Foreign Interest in Ag Land:  
Purchased vs Leased (mil. acres)  
2000-2020

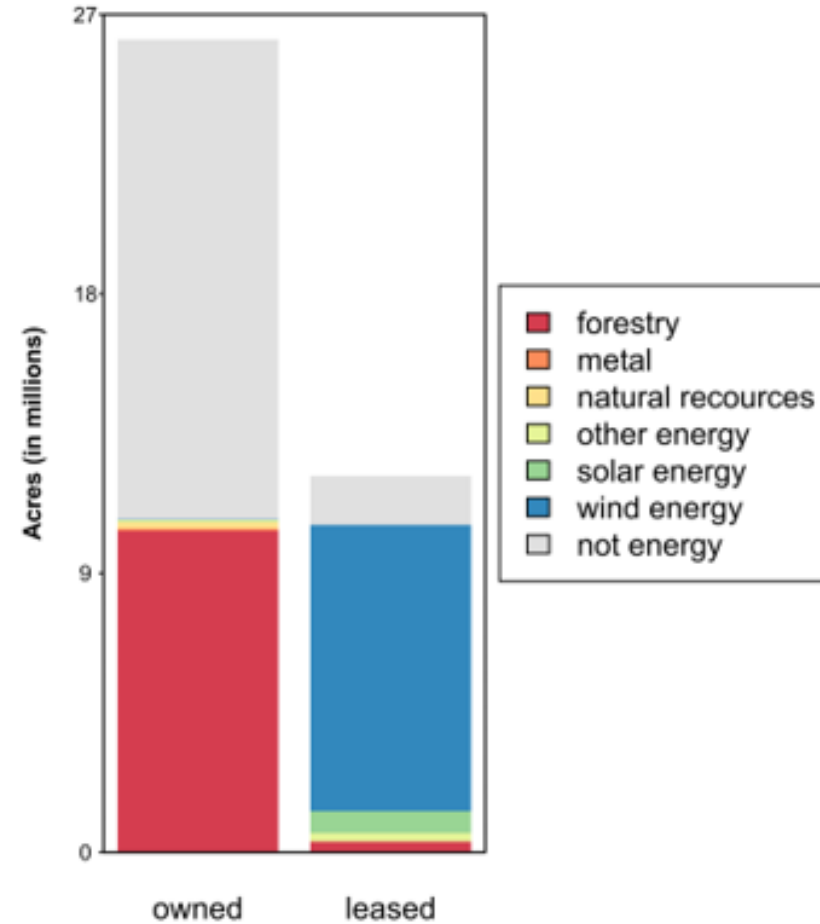
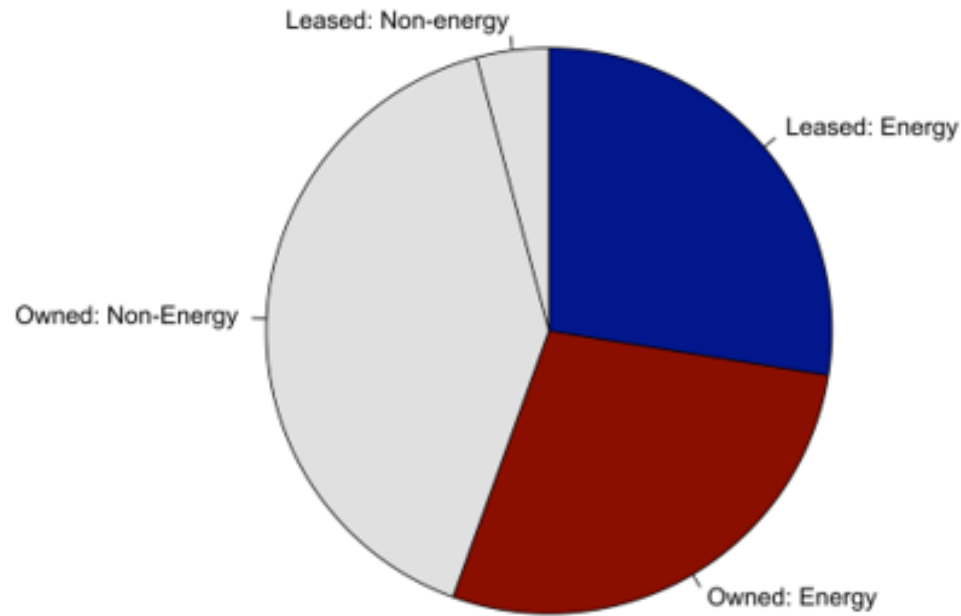


Cumulative Foreign Interest in US Cropland:  
Purchased vs Leased 2000-2020



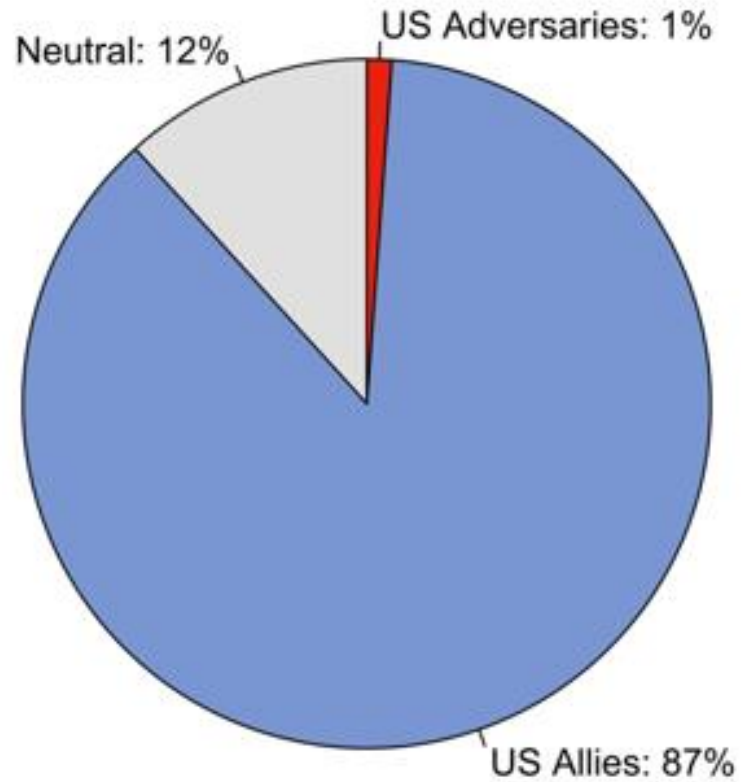
# Foreign Ownership: Energy

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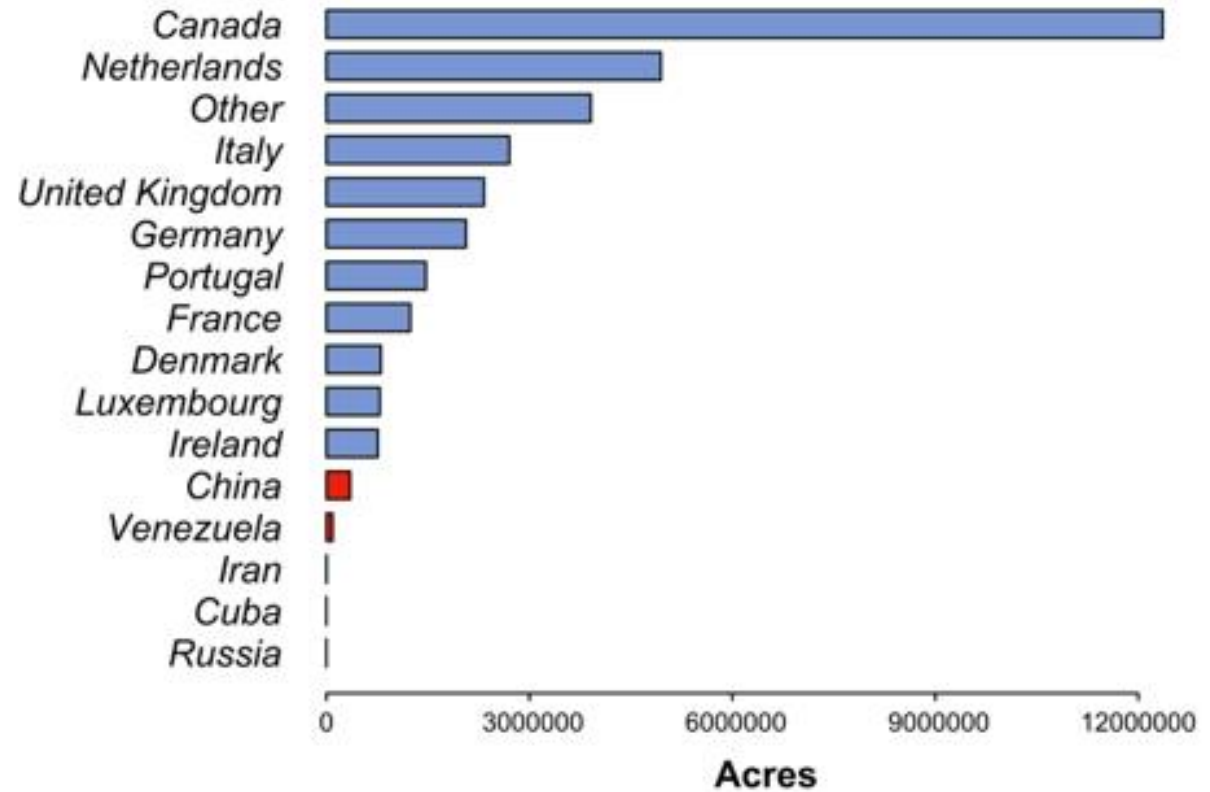


# Foreign ownership: US Allies

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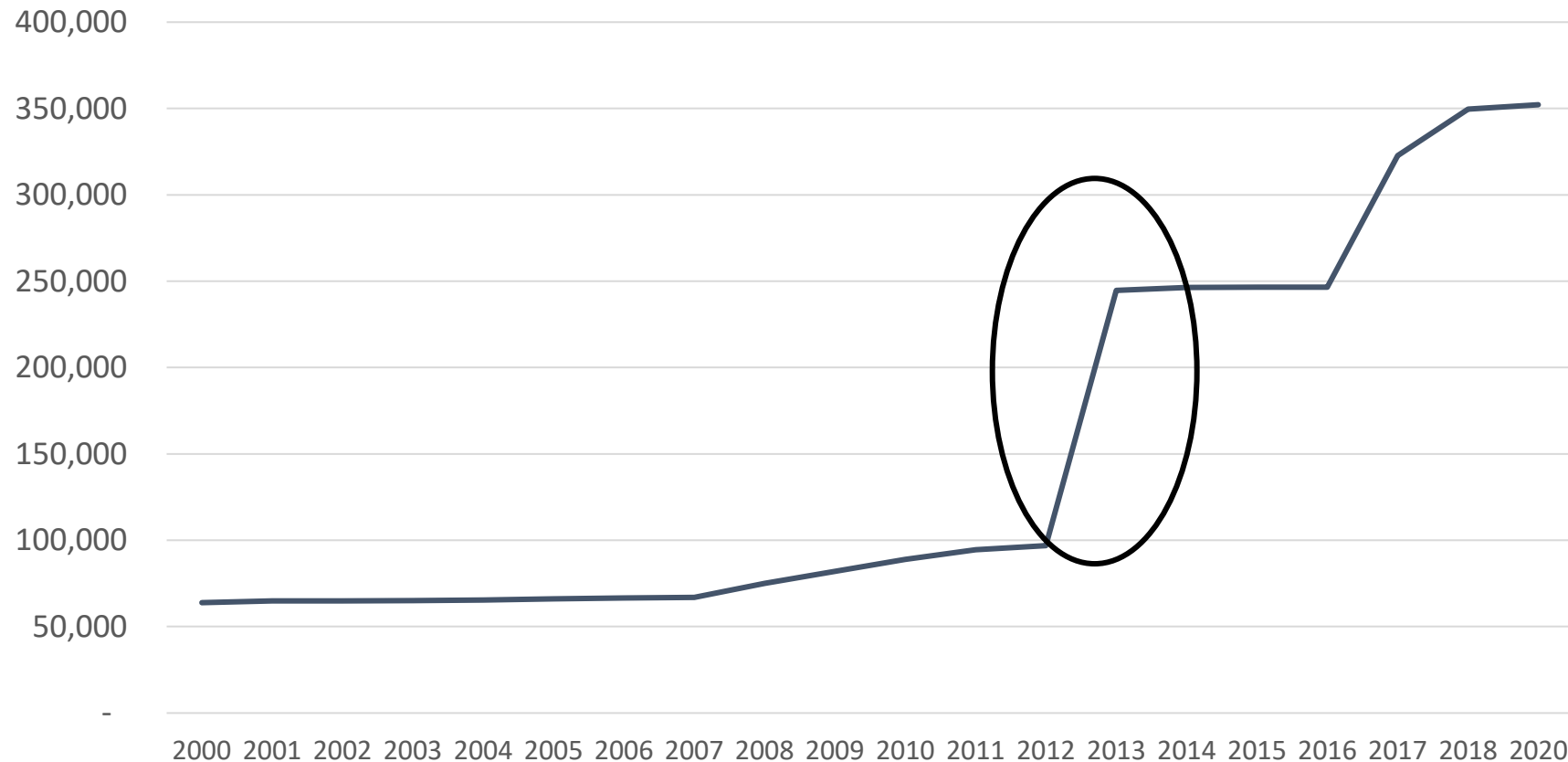


Ag Land Owned by US Allies vs. Adversaries



# Chinese Investment in U.S. Ag Land

China Holdings in U.S. (acres)

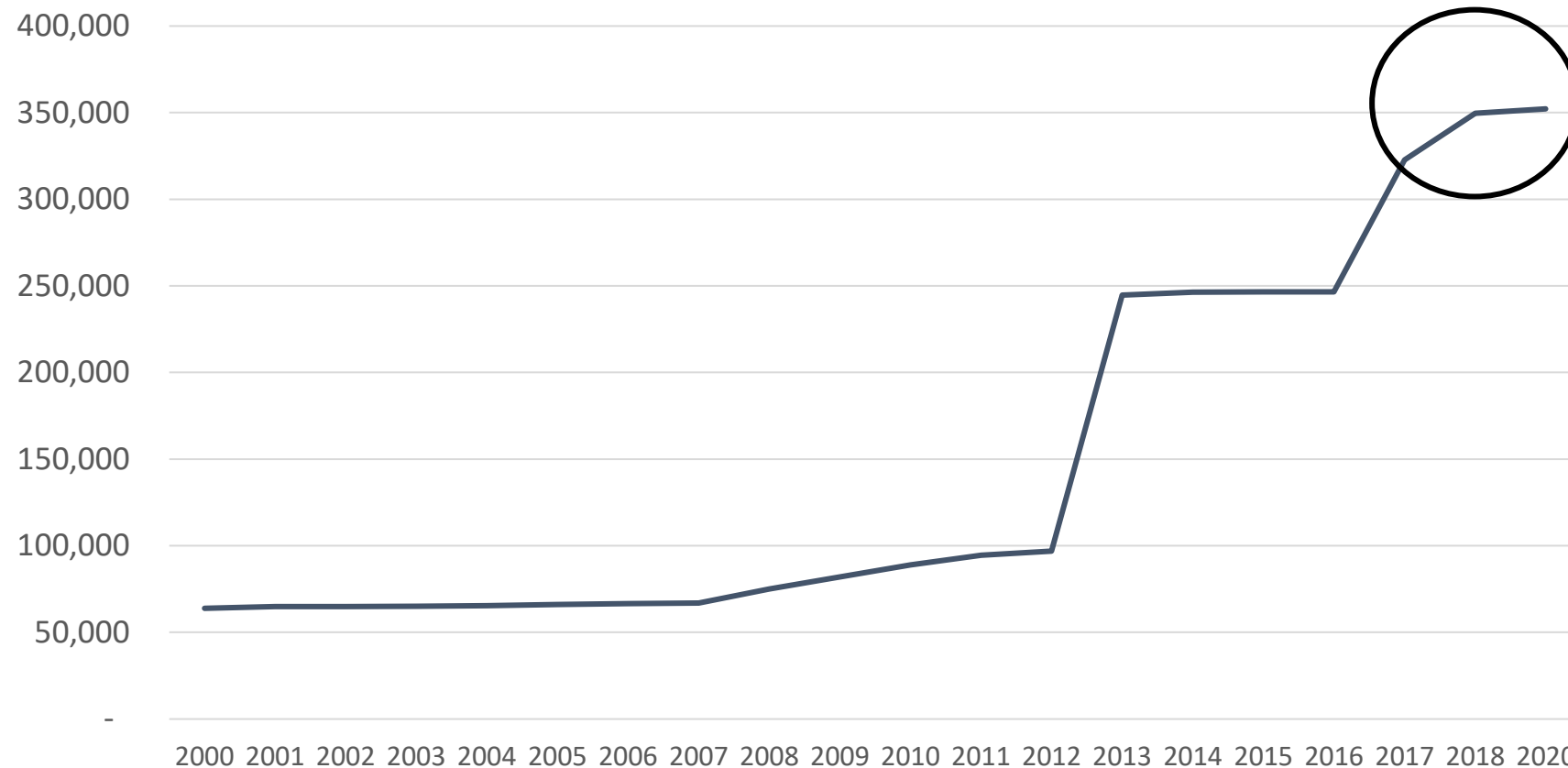


- 2013 Purchase of Smithfield Foods by Chinese company
- Acquired subsidiary Murphy Brown and all their land holdings



# Chinese Investment in U.S. Ag Land

China Holdings in U.S. (acres)



- Total holdings of 352,140 acres
- Slightly less than 1% of foreign held acres



# **Foreign Interest in U.S. Agricultural Land: Empirical Research**

**With  
Wendong Zhang, Cornell University  
&  
Festus Attah, Auburn University**

# Research Question

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- Are purchases made by foreign entities systematically different from those made by others in the farmland market?
- Do they differ by per acre price paid?

# Data Sources

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- AFIDA sales transactions
  - FOIA request to Farm Service Agency
  - 1978 to 2020
  - Includes ownership, buyer, sale prices, county/state, and land-use details
- Focused on foreign sales for 11 states
  - Illinois
  - Indiana
  - Iowa
  - Kansas
  - Michigan
  - Minnesota
  - Missouri
  - Nebraska
  - North Dakota
  - South Dakota
  - Wisconsin

# Data Sources

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- Domestic sales data for those 11 states
  - Collected from two sources: individual county assessor offices and private company
  - 2015 to 2020

# Data Methods

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- Data on domestic sales is 50-100 times more than the number of corresponding foreign land sales recorded by AFIDA
- Foreign buyers are likely to be systematically different than domestic buyers
  - Target different types of farmland, different geographical regions or pay different prices due to transaction costs of buying in the U.S.
  - Would result in selection bias if we did a simple comparison
- Used a coarsened covariate matching method to construct a matched sample that contains comparable foreign and domestic sales
  - Mimics the process used by appraisers to find comparable sales

# Data Comparisons

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Variable	Mean (\$)	Standard Deviation
Foreign Price Per Acre	6,536	4,302
Domestic Price Per Acre	5,745	3,652

Variable	Mean (acres)	Standard Deviation
Foreign Total Acres	461	650
Domestic Total Acres	158	139

# Model

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- Hedonic model of land prices using matched sales

$$\text{Log}(\text{price per acre}) = f(\text{acres}, \text{acres}^2, \text{tillable}\%, \text{AFIDA DV}, \text{county FE}, \text{year FE})$$

- OLS regression



# Results

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Variable	OLS
Acres	-0.0001
Acres <sup>2</sup>	2.62E-08
Tillable%	0.456***
AFIDA DV	<b>0.137**</b>
R <sup>2</sup>	84.84
Observations	925

Note: Rank = 10, County FE's and Year FE's included, \*\*\*p-value 0.01, \*\*p-value 0.05, \*p-value 0.10

Foreign buyers in the Midwest pay a 13.7% premium for agricultural land over domestic buyers

# Results

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- This is similar to the results of Seifert et al. (2021) who use data from eastern Germany
  - They show that farmers have better knowledge of local market conditions and can secure land at lower prices than non-local buyers
- Curtiss et al. (2021) find that local agricultural buyers in the Czech farmland market pay relatively low prices
  - Non-agricultural buyers bid relatively high prices in an attempt to break down local relationships between agricultural buyers and local sellers

# Conclusions

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- Leasing is a common way to acquire access to land in U.S., especially cropland
- Many foreign investors are motivated to develop wind and solar rights
- Limits on demand for farmland may adversely affect the price paid for land
- Purpose of this research is to inform policy-making process

Reference: Mykel R. Taylor, Wendong Zhang, and Festus Attah. 2023. "[Foreign Interests in U.S. Agricultural Lands: The Missing Conversations about Leasing](#)." Forthcoming at **Choices** Magazine published by Agricultural and Applied Economics Association (AAEA)



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