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Mapping and Contextualizing Foreign Ownership and Leasing of U.S. Farmland



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Abstract

Foreign ownership of U.S. farmland has recently attracted growing interest from the public as well as the federal and state policy makers. Using all reported AFIDA transactions, this article provides a comprehensive analysis on the structure of foreign land ownership in the United States. We find that (1) long-term leasing is the main driver of the increasing foreign

interests of U.S. farmland in the past 20 years; (2) a considerable number of foreign transactions are related to wind and solar energy development, especially for entities holding long-term leases; and (3) “adversary” countries like China hold only 1% of all the foreign-owned agricultural land.

INTRODUCTION

Agricultural land is the most valuable asset to any country in the world. The vast agricultural land of the United States plays a vital role in producing a wide variety of food products that feeds not only the U.S. population but also contributes greatly to the global food supply through substantial amounts of exports. From a macro perspective, the U.S. economy benefits greatly from these exports as they help generate revenue, promote trade, and strengthen international relations. Taking a narrower angle, they sustain rural communities by creating employment opportunities and bolstering local economies.

Foreign ownership of U.S. farmland has been a concern among rural communities for a long time (Deaton and Lawley, 2022). While there is no outright ban on foreign land ownership at the federal level, the Agricultural Foreign Investment Disclosure Act (AFIDA) of 1978 requires foreign investors who acquire, transfer, or hold an interest in U.S. agricultural land, including leasehold interests of 10 years or more, report such holdings and transactions to the Secretary of Agriculture on Form FSA-153. Rausser and Schmitz (1980) indicate that the major concern toward foreign investment of U.S. farmland as of the time of their writing primarily came from the indirect effect on entry cost to potential farmers, increasing absentee ownership and the disruption of the traditional union between farm ownership and operation, and the economic well-being of rural communities. Lutrell (1979) argues that the opposition toward foreign investment in U.S. land is the result of emotional factors rather than economic considerations, and

limiting foreign investment is not beneficial to the nation's stock of wealth and its wellbeing. There has also been an ongoing debate about whether the increasing farmland price should be attributed to the foreign purchases of U.S. farmland, but there is no common agreement toward the potential effect as little study has directly addressed this issue.

Early legislation was introduced in the 1970s and 1980s to restrict foreign ownership of U.S. land in general, and 30 states implemented some type of restrictive law by 1984 (Schian, 1984). In the context of agricultural land specifically, a more recent report states that around 24 states¹ have some kind of foreign ownership law to limit or forbid nonresident aliens, foreign business entities, or foreign governments from acquiring or owning private agricultural land (National Agricultural Law Center, 2023a), with each state taking its own approach to restrictions. With the restrictions, foreign ownership has historically been a very small portion of farmland in the United States (Nickerson et al., 2012), although there continue to be concerns regarding the issue. According to the most recent USDA annual report, foreign entities hold around 40 million acres of agricultural land in the United States as of December 31, 2021, which is 3.1% of all privately held agricultural land and 1.8% of all land within the U.S. (USDA-FSA, 2021).

Recently, public concern around this issue has been escalating due to the increasing foreign interests in U.S. farmland during the past two decades and the growing attention of public media and politicians on “adversary countries.” Despite rising apprehensions around this issue, the structure of foreign land ownership in the United States, especially in a more current context, has not been extensively studied in the literature and is mostly absent from the heated social discussion. This article aims to provide more quantifications of the current situation of foreign land ownership in the United States by answering three main overlooked questions in the current policy debate: (1) What is the role of long-term leases in shaping foreign interests in U.S. farmland? (2) To what extent has the recent growth in foreign interest in U.S. farmland been driven by renewable energy investments on solar or wind? (3) Which countries are the major foreign owners of U.S. farmland, U.S. allies or so-called “adversaries”? Based on the database of over 40,000 AFIDA foreign transactions from 1970–2020 obtained from a Freedom of Information Act (FOIA) request, we specifically focus on how long-term leasing and the wind/solar energy development sector play significant roles in the recent trend of foreign interests in U.S. agricultural land.

Three main results stand out from the analysis of the AFIDA data: (1) long-term leasing is the main driving force of the increasing foreign interests in U.S. farmland in the past 20 years; (2) a considerable number of foreign entities invest in renewable energy such as wind and solar energy development instead of agricultural production; and (3) “adversary” countries account for only 1% of all the foreign-owned agricultural land in the United States. These aspects are missing from the public narratives of politicians but are undoubtedly valuable insights that can unravel the current structure of foreign land ownership in the United States and inform policy makers about the future of foreign land acquisition.

BACKGROUND

Over the past two years, numerous states have proposed legislation aimed at limiting foreign ownership. These proposed bills exhibit a range of intricacies and differentiate between individuals and corporations. In parallel, at the federal level, several proposed measures seek to exert control, prohibit, impose restrictions, or heighten oversight of foreign investments within the U.S. agricultural sector. The University of Arkansas National Agricultural Law Center splits the proposed measures of the 117th Congress (2021–2022) into four categories, some of which overlap (National Agricultural Law Center, 2023a). The proposed bills either (1) restrict or prohibit foreign ownership/investment in U.S. real estate for all foreign countries or a subset of countries; (2) amend the AFIDA to require the Secretary of Agriculture to make land purchase reports publicly available or tighten reporting requirements by requiring foreign entities reporting leases 5 years or more as opposed to 10-year-or-more leases; (3) prevent foreign participation in U.S. government farm programs or access to credit or financial services offered by the Farm Credit System; or (4) add the Secretary of Agriculture to the Committee on Foreign Investments in the United States (CFIUS).

Seventeen states have some kind of restrictions on foreign ownership of land, but each state's restrictions vary based on the definition of agriculture or farming, restrict certain kinds of foreign owners, or allow foreign owners to only purchase up to a certain amount of agricultural land. Several states, such as Iowa, already had restrictions on corporate land ownership that affects both foreign and U.S. companies (National Agricultural Law Center, 2023b). From 2021 through 2022, 12 states (Alabama, Arizona, Arkansas, California, Indiana, Iowa, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, and Texas) have proposed legislation that seeks to restrict certain foreign

investments in real property and agricultural land located within the boundaries of their state. In 2023, this momentum persisted, with the majority of states either already having or planning to propose similar legislation (National Agricultural Law Center, 2023a). Based on the recent flurry of activity, it is reasonable to expect that federal and state governments will propose and enact even more measures in the near future.

Notably, in April 2023, Arkansas implemented legislation that imposes restrictions on specific foreign investments in land within the state. Put more precisely, the law introduced two distinct prohibitions: the first barring a prohibited foreign party (PFP) from acquiring agricultural land and the second prohibiting any acquisition of real property within the state by a “prohibited foreign-party-controlled business” (National Agricultural Law Center, 2023d). On October 17, 2023, Arkansas’s Attorney General ordered a subsidiary of Syngenta Seeds, a company ultimately owned by a Chinese state-owned entity, to divest its ownership interest in about 160 acres of agricultural land due to the restriction prescribed under the newly enacted foreign ownership law. As a result, Arkansas became the first in the nation to enforce a state law banning certain foreign entities from owning agricultural land (National Agricultural Law Center, 2023d; Associated Press, 2023).

In addition to general legislation affecting foreign land ownership, the recent strategic classification of “adversary” countries holds significant implications within the realm of foreign land ownership in the United States. As of June 2023, the U.S. Department of Commerce (DOC) has officially designated China, Russia, Cuba, Venezuela, Iran, and North Korea as “foreign adversaries” (National Agricultural Law Center, 2023a). Notably, as of March 2023, 14 states have proactively enacted some kind of legislative measures aimed at barring entities affiliated with these countries from purchasing agricultural land in the United States (Tsfaye, 2023). For example, Iowa has banned the Chinese government as well as any persons or entities from China from acquiring any real properties located in the state. Concurrently, several other states are proposing similar prohibitory measures. This trend appears to be driven by the escalating tension between Washington and Beijing, as well as a confluence of other international events, which result in increasing concerns about national security. The deteriorating U.S.-China relationship, in particular, has amplified debates surrounding Chinese holdings of U.S. agricultural land and concerns about national security of the U.S. food supply chain.

DATA AND METHODS

Enacted by Congress in 1978, the AFIDA is a federal law that requires foreign entities (individuals, businesses, and governments) to report transactions involving agricultural land to the USDA Farm Service Agency. Thus, a foreign entity that acquires, holds, transfers, or disposes of an interest in agricultural land located within the United States is required to disclose certain information concerning such transactions, investments, and acquisitions. The AFIDA database provides disclosed information about the foreign entities that hold U.S. agricultural land, including the name of the foreign entity, nationality, location, date of acquisition, type of interest, acquisition methods, land use (crop, pasture, forest, and other agriculture), parcel acreage, and more. Specific details about the information can be found in the Farm Service Agency form (FSA-153).

Here, we provide specific details about what variables we used in this research and the methods utilized for analysis. Specifically, our study incorporates several key variables: for acreage, “Number of Acres” denotes total acres acquired by a foreign entity, whereas “Crop,” “Pasture,” “Forest,” and “Other Agriculture” further separate the total acreage by general land usage. For location, we used “State” to categorize each foreign entity into one of the 10 USDA Agricultural Production Regions described in Cooter et al. (2012). Additionally, for a more granular geospatial analysis, “County” and “FIPS” serve as vital tools, enabling the creation of multiple county-level maps to augment the spatial dimension of our research. We also use “Country” to classify all foreign entities into three overarching categories: “US Allies,” “Adversaries,” and “Neutral.” For ownership structure, “acquisition method” signifies the recorded status at the time of land purchase, whereas “type of interest” encapsulates current ownership status. This enables us to distinguish foreign entities with either whole ownership or long-term leases, with specific emphasis on the latter.

In addition to the variables mentioned above, “Owner Name” shows the precise name of the foreign entities, so we applied keyword inclusion with Boolean conditions to search and classify entities with ties to energy or natural resource sectors. This categorization yields seven distinct categories: “forestry,” “solar energy,” “wind energy,” “metal,” “natural resources,” “other energy,” and “not energy.” Specifically, entities featuring keywords such as “timber,” “wood,” or “forest” are categorized as “forestry”; those with “solar” are designated as “solar energy”; entities containing “wind” are categorized as “wind energy”; those featuring items like “copper,” “metal,” or “mineral” fall under “metal”;

entities referencing “resource” or “natural resource” are classified as “natural resource”; those incorporating “energy” are categorized as “other energy”; while entities not conforming to any of these keyword criteria are grouped under “not energy.”

RESULTS

Current Situation

Figure 1 provides a comprehensive depiction of foreign-held farmland in the United States, categorized by its current land use as of the year 2020. The visual representation underscores some noteworthy spatial patterns: (1) foreign-held pastureland is generally located in the Western United States; foreign-held forest is predominantly distributed in the Northeast, Southeast, and Northwest; and (3) foreign-held cropland displays a relatively more dispersed spatial allocation when compared with the previous two categories.

We were also able to calculate the percentage of privately held cropland held by all foreign owners as of the year 2020 using data from the AFIDA and the National Agricultural Statistics Service. Figure 2 encapsulates the percentages, shedding light on the extent of foreign entity presence in each county. High percentages are evident in numerous counties located within the Mountain and Southern Plains regions. In contrast, the Corn Belt, which is traditionally renowned for its good agricultural productivity, exhibits comparatively lower percentages. It is important to acknowledge a limitation associated with this visualization. The total acreage of private cropland varies considerably across different counties. Consequently, regions with higher percentages do not necessarily correlate with higher acres of foreign-held cropland. Nevertheless, it remains a reasonable inference that foreign presence in the states located in Mountain and Southern Plains regions is generally more pronounced when compared to the Corn Belt region. Additionally, our analysis reveals that 648 counties exhibit 0% of foreign-held cropland, with an additional 774 counties featuring missing data but possessing a high likelihood of also reporting 0%. In these counties, the influence of foreign investors on privately held cropland is minimal.

Long-Term Lease vs. Ownership

An important aspect of foreign land acquisition pertains to the type of ownership structure employed. Taylor et al. (2023) highlight a salient trend: the majority of recent land acquisition by foreign entities leans heavily toward long-term leases rather than whole

ownership. The AFIDA requires respondents to specify one of six ownership structures for the land they have acquired: (1) whole ownership; (2) partial ownership; (3) life estate; (4) trust beneficiary; (5) purchase contract; and (6) other (as per FSA-153). Category 6 mainly consists of long-term leases of 10 years or longer. We label the data from category 6 as “leased” versus the amalgamation of the other five categories, collectively termed “owned.”

Figure 3 unveils a compelling representation of this distinction via three-by-three maps, where each row corresponds to a specific year (2000, 2010, and 2020), and each column stands for a category of ownership type (all data, owned, or leased). We can observe the noticeable increase of foreign-held farmland by long-term lease from 2000 to 2020, as shown in the third column. This graphical depiction provides further empirical evidence affirming that leasing has emerged as the primary catalyst propelling the growing foreign interests in U.S. farmland from 2000 and 2020.

Energy and Natural Resource Company

According to Taylor et al. (2023), the impetus behind the acquisition of U.S. land in recent years predominantly centers on renewable energy production. By scrutinizing the names of the foreign entities, we can glean valuable insights into the intended purpose of their land usage. Our categorization process classified these entities into seven categories by the inclusion of specific keywords: (1) forestry, (2) metal, (3) natural resources, (4) other energy, (5) solar energy, (6) wind energy, and (7) not energy. As depicted in Figure 4, most of the land leased by foreign entities is used for wind and solar energy development, constituting a substantial 81.85% share, whereas the land held in whole ownership focuses more on wood and timber production and other non-energy-related activities.

When we combine the revelation that a significant proportion of recently acquired land by foreign entities is held under long-term leases, coupled with the significant presence of wind and solar energy development within the leased category, a compelling narrative emerges. It strongly suggests that the recent foreign investment landscape in U.S. farmland is primarily geared toward energy development, rather than agricultural or food production.

U.S. Allies vs “Adversary” Countries

The pie chart in Figure 5 illustrates a stark contrast in foreign interests in U.S. agricultural land. We can

see that U.S. allies comprise a substantial majority, accounting for 87% of foreign interests, whereas the combined holdings of “adversary” countries represent 1% of foreign interests. Among allies, Canada, the Netherlands, Italy, the United Kingdom, and Germany emerge as the top five investors, collectively holding an impressive 72.15% of all foreign-owned farmland. Canada stands out as the largest owner of foreign-held U.S. agricultural land, owning 12,361,087 acres or 36.55% of the total foreign-held land. In contrast, within the category of “adversary” countries, China owns a relatively modest 352,139 acres, constituting a mere 0.92% of all foreign-held farmland.

Table 1 provides a more detailed comparison between the top five U.S. allies and the “adversary” countries by separating the total acreage held in one of the 10 agricultural production regions (USDA Farm Production Regions; Cooter et al., 2012). We can see that the top five countries have acquired substantial tracts of land across all 10 regions. Conversely, both the acreage held and the overall presence of the “adversary” countries in many of the regions are significantly lower than that of the U.S. allies.

DISCUSSION

Foreign Ownership of Agricultural and Food Processing Facilities and CAFOs

Beyond concerns about foreign entities, particularly those from China, acquiring U.S. farmland, there is a growing apprehension regarding foreign ownership extending to agricultural processing facilities and Concentrated Animal Feeding Operations (CAFOs). This broader spectrum of foreign ownership could raise potential threats to the domestic food supply chain and local communities.

In recent years, one of the most noteworthy instances of foreign acquisition in the American food industry was the 2013 purchase of Smithfield Foods by the Chinese company WH Group for \$4.7 billion (Schneider and Dennis, 2013). This transaction resulted in the formation of the world’s largest pork producer through the amalgamation of the two entities. Previously known as Shuanghui, WH Group is purported to have received subsidies from the Chinese government. Significantly, this acquisition stands out as the largest Chinese takeover of an American company to date.

Brazilian companies are also important players in the American food system. Notably, JBS, a meatpacker company with affiliations to the Brazilian government, acquired Swift Foods Co. in 2007 (Jelmayer, 2007) and

purchased the controlling stake of Pilgrim’s Pride in 2009 (ABC News, 2009; Thomas, 2022). Furthermore, Marfrig Global Foods, another Brazilian meatpacker company, has 31% ownership of the National Beef Packing Company. The latter, ranking as the fourth-largest beef processor in the United States, is presently predominantly owned by foreign entities, with 80% foreign ownership (Walljasper, 2019). These acquisitions and foreign-heavy ownership structures have raised alarms among local communities and legislators.

This issue was also brought up during a recent hearing titled “Foreign Ownership in U.S. Agriculture” by the Senate Agricultural Committee, where Senator Cory Booker expressed apprehensions about multiple facets of the food system falling under the control of foreign corporations, encompassing seeds, meat processing, and grocery stores (Rapoza, 2023).

The prevailing concern revolves around the potential risk to U.S. food security, as increased foreign ownership could pave the way for the introduction of lower-quality food products into American households. For example, the USDA temporarily stopped the import of Brazilian beef in 2017 due to public health concerns, sanitary conditions, and animal health issues (Walljasper, 2019; Phillips, 2017).

This paper does not furnish a comprehensive analysis of the existing structure of foreign ownership in agricultural and food processing facilities, including CAFOs. Nevertheless, it is important to underscore that this facet is of equal significance to that of agricultural land ownership. The lack of studies in this regard opens avenues for future research to delve into this crucial aspect, thereby addressing the complexities associated with foreign ownership in food processing facilities and CAFOs and how that might affect national security.

Location and Land Use

The geographical location and land use purposes of foreign interests in the United States also raise public concerns for national security. Some argue that AFIDA data lacks transparency and accuracy (Tesfaye, 2023; National Agricultural Law Center, 2023c), and others suggest that the specific locations of the foreign-held land and the purpose of the purchases might have more significant impact on national security. However, currently we do not have information on the specific details of the underlying purposes of these acquisitions and their accurate proximity to critical security facilities, such as government agencies and military bases. Nonetheless, we can analyze the TIGER/Line and Rural-Urban Continuum data in tandem

with AFIDA data to share preliminary insights into this matter. This could serve as a foundation for future studies, providing a starting point to delve deeper into issues related to national security, location, and land use purpose.

We acquired TIGER/Line military installations data from the U.S. Census Bureau, encompassing location information on all 536 military bases in the U.S., which was subsequently merged with the AFIDA database. The merged data, aggregated by the USDA farm production region, culminated in the creation of Appendix Figures A and B. Figure A illustrates the acreage of foreign-purchased land situated within counties that also house military installations, while Figure B represents the number of counties with foreign-held agricultural land that also contains military installation. Depicted in red, foreign-owned land coexisting with military bases within the same counties is observed across all major regions. A particularly noteworthy observation is the Pacific region (encompassing California, Oregon, and Washington), which stands out with the highest percentage of foreign-held agricultural land located in counties that have military installations.

In our analysis, we also incorporated the Rural-Urban Continuum data obtained from the USDA's Economic Research Service (ERS). This dataset employs a classification scheme that categorizes counties based on their level of urbanization, assigning each county a code ranging from 1 to 9. Higher numerical codes indicate a greater degree of urbanization for the respective counties. In Figure C, we categorized foreign-held land based on the level of urbanization in the respective counties and aggregated this data by USDA farm production region. We can see that in the regions of the Northern Plains, Northeast, Mountain, and Lake, a higher share of foreign purchased land is in more urbanized regions.

CONCLUSIONS AND POLICY IMPLICATIONS

This article presents a comprehensive analysis of the landscape of foreign land ownership in the United States utilizing data from the AFIDA. Our investigation reveals that over the past two decades, while foreign interests in U.S. agricultural land have demonstrated a steady increase, a significant portion of the recently acquired farmland by foreign entities is held under long-term leases rather than in full ownership. Furthermore, our findings indicate that the primary acquirers of agricultural land are energy development and natural resource entities, as opposed to entities

primarily engaged in agricultural or food production. This distinction holds particularly true for those entities holding long-term leases. Specifically, the emergence of wind and solar energy farms represents a notable trend of the recent foreign investment in U.S. agricultural land, and their effect on the U.S. food supply chain is likely limited. Another crucial aspect that has often been overlooked is the distribution of foreign-held farmland among “adversary” countries and U.S. allies. Notably, “adversary” countries hold a mere 1% of all foreign-held farmland, with U.S. allies accounting for a substantial 87% of said holdings. The historical presence of “adversary” countries in the U.S. agricultural land has been minor, and our analysis suggests that this trend is likely to persist in the future, given how more states have recently enacted or are proposing for prohibiting or limiting these countries from obtaining U.S. farmland.

This study is subject to several limitations that warrant discussion. First, due to the absence of precise information regarding the intended land usage within the AFIDA dataset, we resorted to categorizing foreign entities (energy or natural resource) based on the presence of specific keywords in the entities' names. It is important to acknowledge that this approach may not comprehensively capture the actual land usage intentions of all these entities, which results in some level of uncertainty. Second, concerns have been raised by various stakeholders regarding the accuracy, transparency, and reliability of the AFIDA data. Notably, members of the House of Agricultural Committee (Tesfaye, 2023), U.S. House Republicans (National Agricultural Law Center, 2023c), and other policy makers have expressed reservations about the AFIDA. They argue that the data may suffer from potential underreporting of foreign ownership of agricultural land, raising doubts about its completeness and accuracy. If these speculative concerns are indeed validated, there exists a risk that the findings presented in this study could be compromised by the quality of the underlying data.

As new data becomes available in the future, prospective research endeavors could extend the scope of this study to encompass the present state of foreign ownership within the broader food supply chain, incorporating areas like CAFOs. Additionally, there is considerable potential for investigations into the role of location and land use in this context. For instance, a quantitative exploration of proximity to military installations could be undertaken when relevant data becomes available. Undertaking such studies would not only contribute to the understanding of foreign ownership within the U.S. food supply chain but also provide invaluable insights into policy considerations

regarding national security. The outcomes of such research endeavors could offer perspectives for the development of policies safeguarding both economic interests and national security in the context of foreign ownership in critical sectors.

Future research endeavors also hold promise in shedding light on the evolving landscape of foreign ownership of U.S. agricultural land. These future studies may be directed toward conducting rigorous impact evaluations, specifically focusing on the surge in legislative activities that have marked 2023. A particular area of interest lies in assessing the effectiveness of these legislative efforts, especially concerning “adversary” countries such as China. Such analyses could offer invaluable insights into the practical implications of the regulatory measures on Chinese entities aspiring to acquire or currently possessing U.S. farmland. Furthermore, it is prudent to consider the potential comparative dimension of these investigations. Such a comparative approach would enable a longitudinal assessment of the impact of legislative actions and policy changes on the structure of foreign ownership within the United States agricultural sector. These future research trajectories hold the promise of enriching our understanding of the intricate dynamics that underlie foreign land acquisition in the United States, offering a deeper comprehension of the consequences of policy interventions in this domain.

FOOTNOTES

1 24 States: Alabama, Arkansas, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Montana, Nebraska, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, and Wisconsin.

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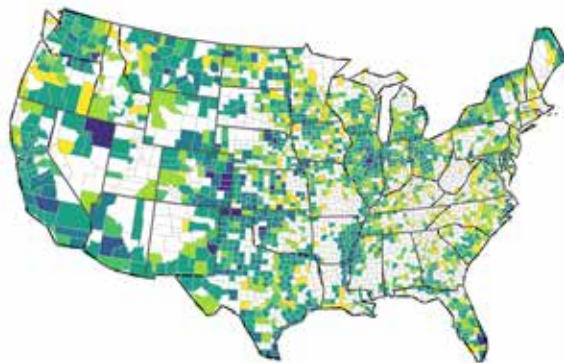
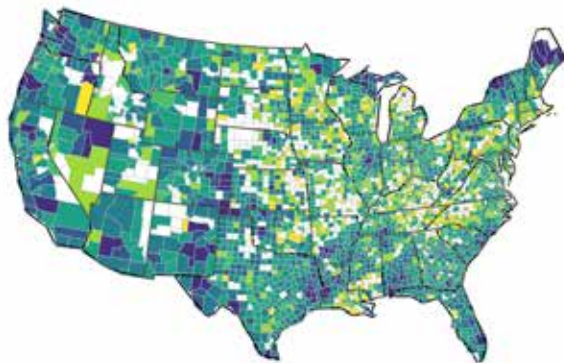
Total land with foreign interests: 38.3 million acres, 2.9% of all US farmland.

Foreign owned or leased land in acres



All

Crop



Pasture

Forest

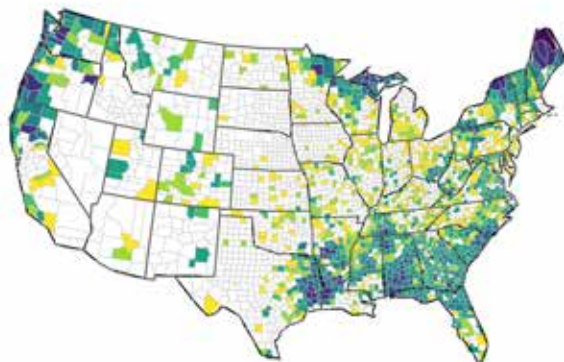
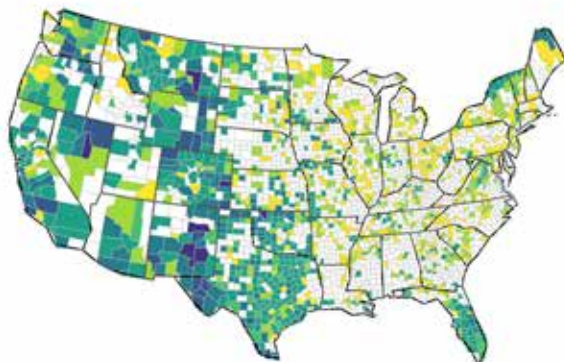


Figure 1. Foreign ownership of U.S. farmland by all countries as of 2020

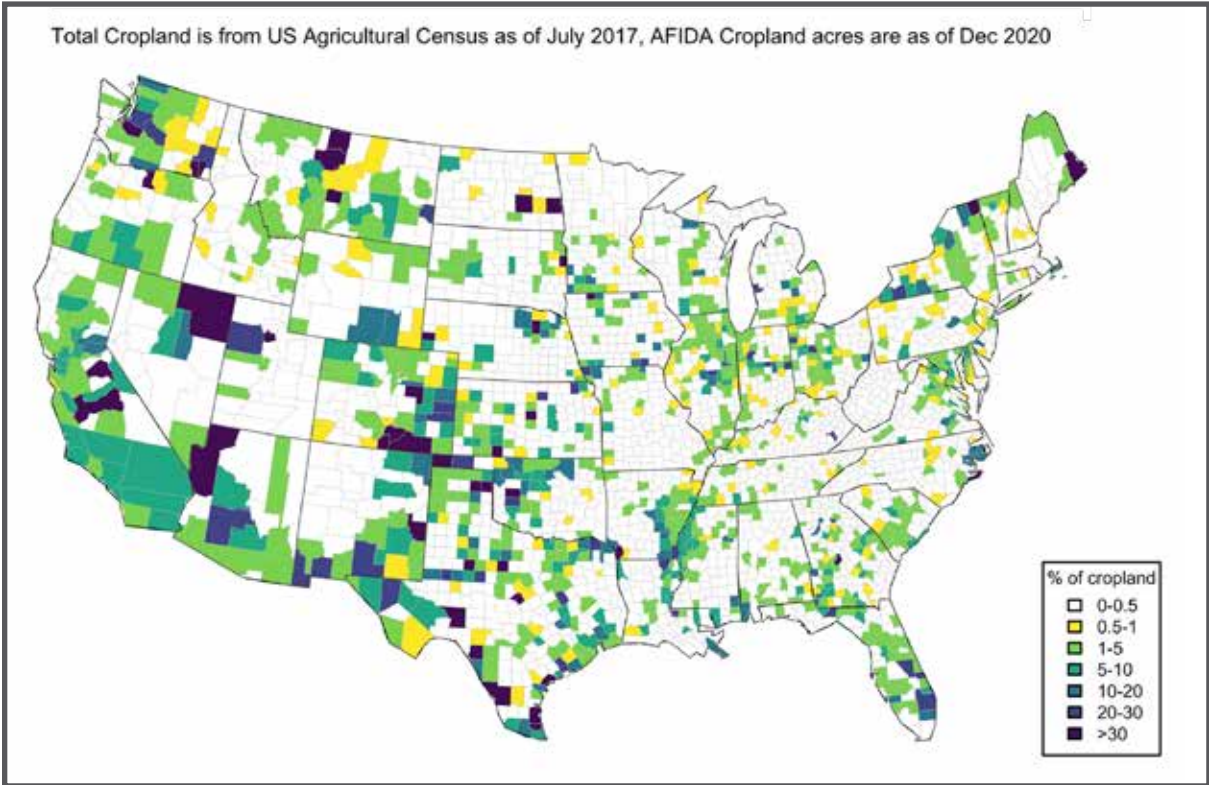


Figure 2. Percent of privately held cropland held by all foreign owners as of 2020

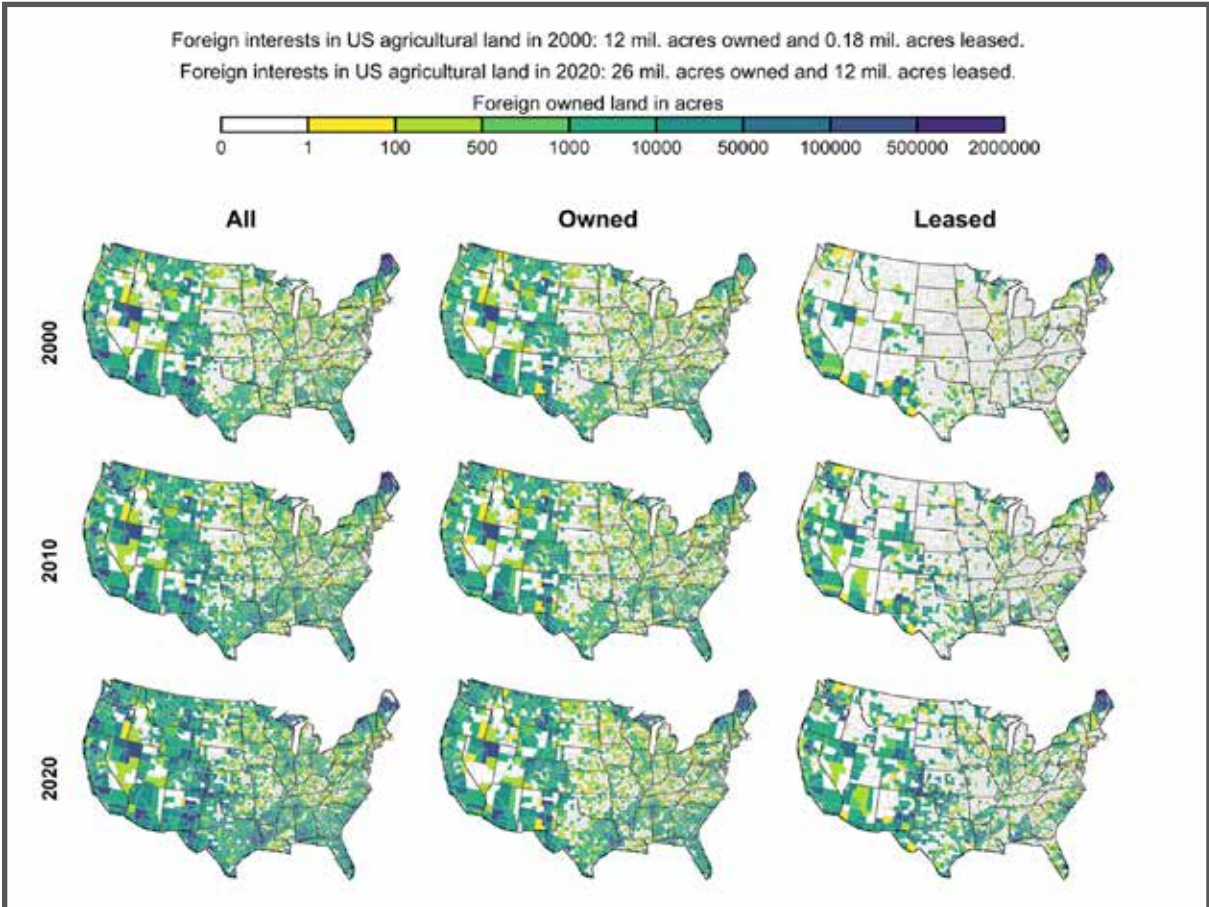


Figure 3. Foreign interests in U.S. farmland by all countries as by 2000, 2010, and 2020

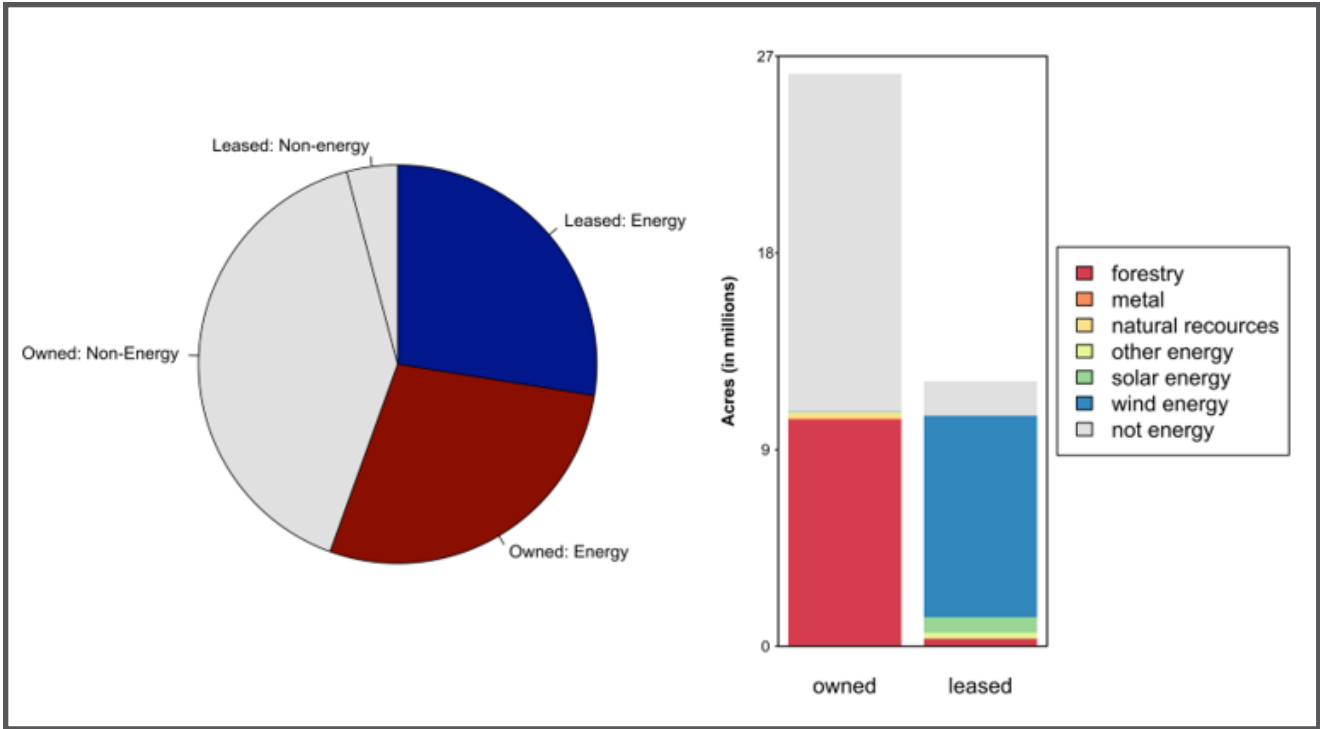


Figure 4. The significance of energy companies in foreign interests in U.S. farmland

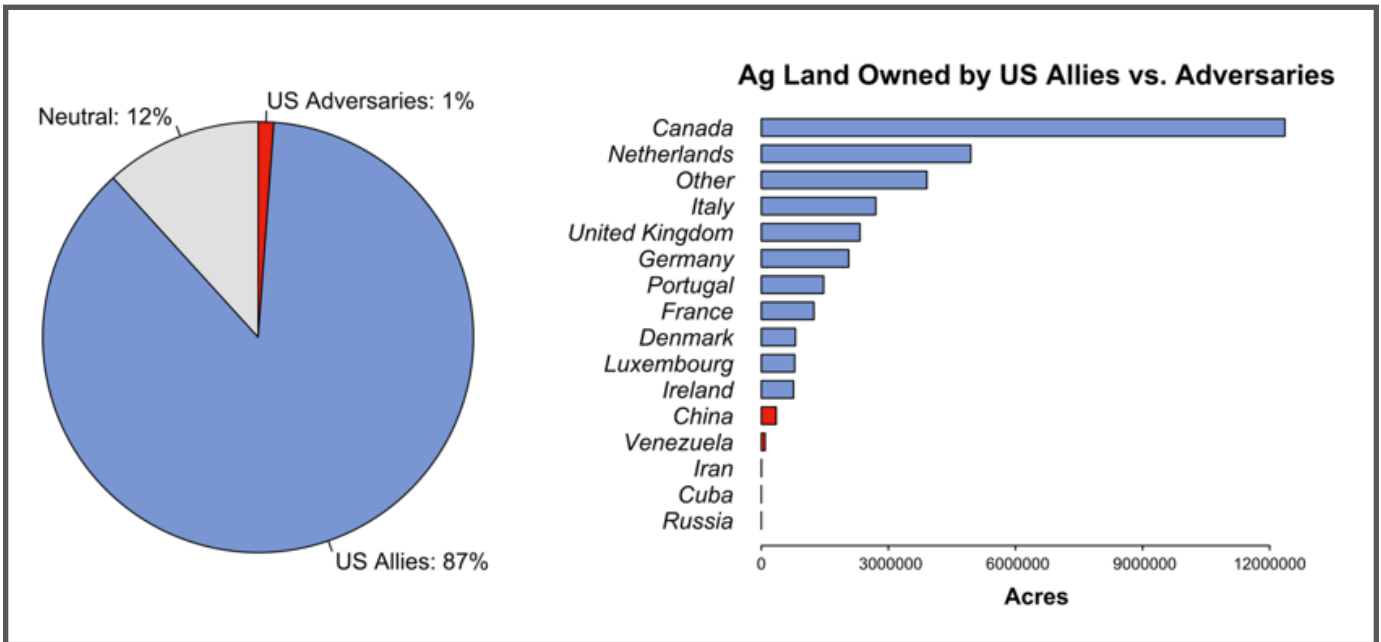


Figure 5. U.S. farmland owned or leased by U.S. allies versus U.S. "adversaries"

Table 1. Foreign Interests in U.S. Farmland by Foreign Country and USDA Farm Production Region.

	US Allies					Adversaries				
	Canada	Netherlands	Italy	United Kingdom	Germany	China	Russia	Venezuela	Iran	Cuba
Appalachia	163963	472156	59859	127847	84247	63294	11	2380	428	0
Corn Belt	514078	116262	602967	134904	271725	43936	0	14247	457	0
Delta	685229	1077146	65926	183777	163106	108	0	0	0	0
Lake	482086	467284	187721	113301	48866	0	0	0	0	0
Mountain	1586880	199151	319202	528149	445635	47770	0	20835	0	0
Northeast	3313311	358519	4771	137428	100562	2936	761	3513	788	0
Northern Plains	981433	23483	697491	118329	64605	0	0	0	169	0
Pacific	1258951	357190	12496	658770	125353	13589	40	1500	1507	0
Southeast	627414	1432449	23032	160097	395669	16729	0	46006	11	10
Southern Plains	2477418	403923	729406	164102	353102	163288	10	1137	964	838
Total	12090763	4907565	2702871	2326704	2052870	351651	822	89618	4324	848

Note:

USDA Farm Production Regions (Cooter et al., 2012)

Available at: https://www.researchgate.net/figure/USDA-Farm-Production-Regions_fig2_235609824

APPENDIX

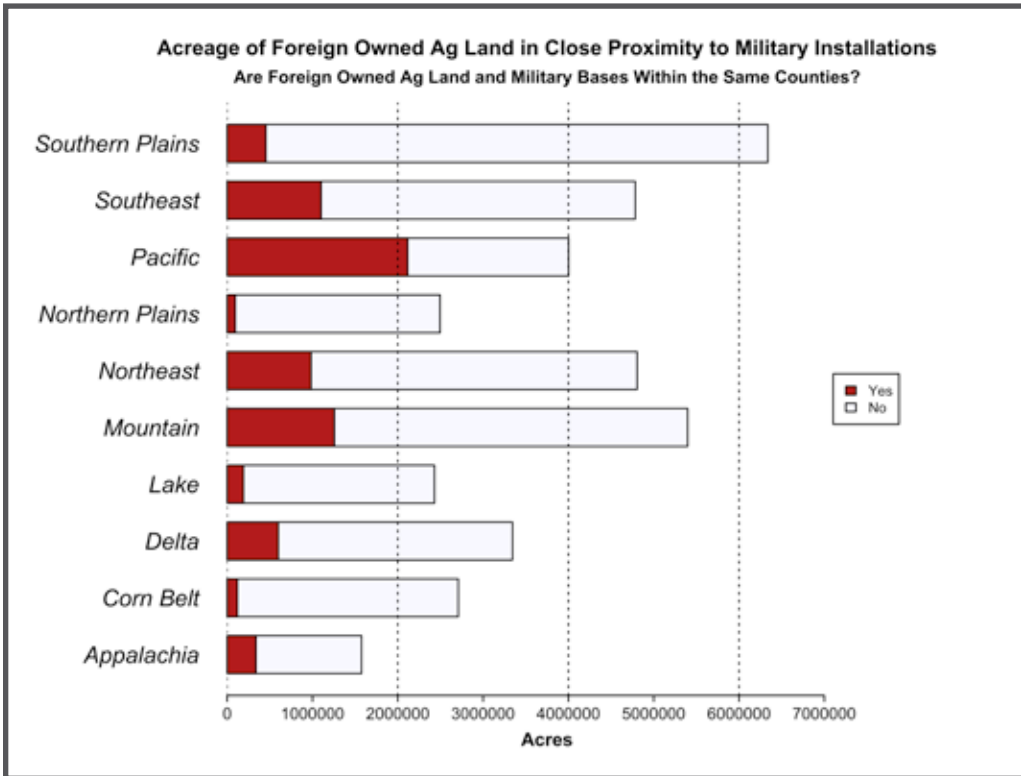


Figure A. Foreign interests by counties with or without military installations

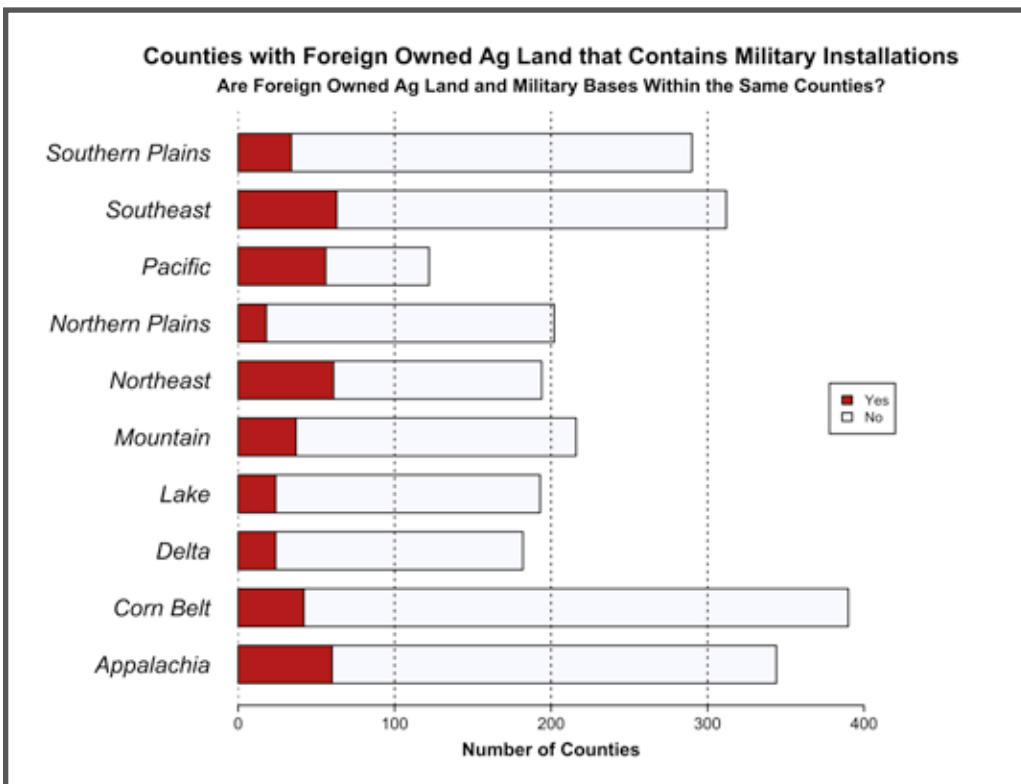


Figure B. Counties with foreign-owned ag land that contains military installations

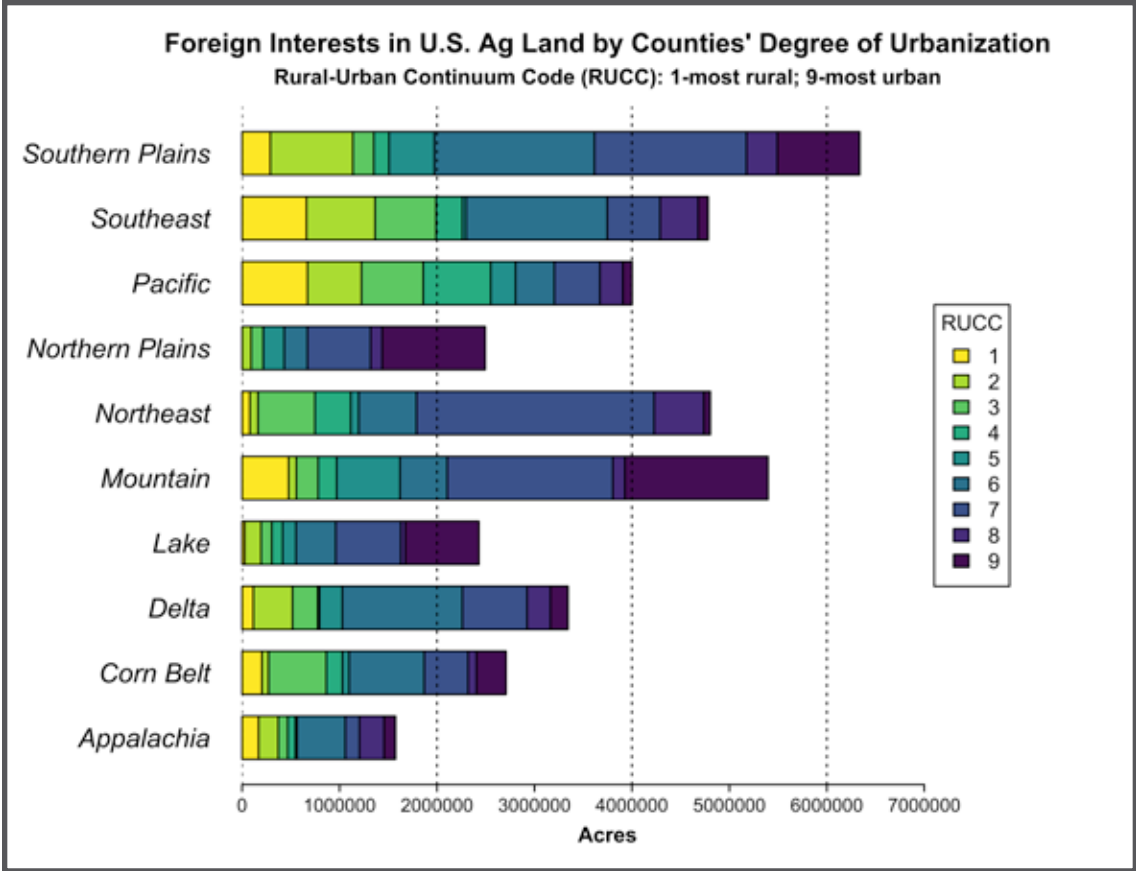


Figure C. Foreign interests in U.S. ag land by degree of urbanization