

Beginning, Minority, and Women Farmers Agricultural Credit Usage

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Confronting Barriers to Entry into Midwest Agriculture:
Stories and Policies

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Acknowledgments & Disclaimer

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- The views presented here do not necessarily reflect the views of the US Department of Agriculture, The Farm Credit Council or the University of Arkansas
- Bruce Ahrendsen and Ron Rainey are professors and Heather Snell is a former program associate in the Department of Agricultural Economics and Agribusiness at the University of Arkansas Division of Agriculture; Charles Dodson is a Senior Agricultural Economist and Gianna Short is a Agricultural Economist (Data Scientist) at the USDA Farm Production and Conservation.

Purpose and Motivation

- Identify beginning farmer and rancher (BFR) operations
- Examine credit usage by BFR
 - BFR has 10 or fewer years experience operating any farm
 - By Socially Disadvantaged Farmer & Rancher (SDFR) status
 - By state
- Estimate shares of BFR operations using USDA Farm Service Agency credit
- Gauge lender success and potential gaps in serving BFR

Purpose and Motivation

- SDFR are identified as belonging to historically underserved groups; USDA defines SDFR as:
 - Women
 - Hispanic, Latino, or Spanish Origin
 - American Indian or Alaskan Native
 - Black or African American
 - Asian
 - Native Hawaiian or other Pacific Islander
- Increasing numbers of SDFRs
 - Predominately women (Pilgeram *et al.*, 2020)
 - And women of all ages and experience, including women BFR

Data and Methods

- USDA, National Agricultural Statistics Service, Census of Agriculture data for 2012 and 2017 to consider population changes
 - Beginning SDFR operations are identified as an operation where the principal operator in 2012 or primary producer in 2017 is a member of the particular SDFR group and a BFR
 - Primary producer, from among up to four producers in 2017, is a
 - Principal Operator
 - Made the most decisions for the farm
 - » Worked fewest number of days off the farm
 - Listed first

Data and Methods

- USDA, Agricultural Resource Management Survey (ARMS) data linked with Farm Service Agency (FSA) loan program administrative data
 - To estimate shares of BFR operations using FSA credit

Table 1. Primary Producers Identified by SDFR Status, 2017^{a,b}

SDFR Status	Number of SDFR	% of all primary producers
Women	488,999	23.9
Minority	158,915	7.8
Hispanic	66,727	3.3
Am Indian / Alaska Native	48,507	2.4
Black / African Am	33,088	1.6
Asian	13,693	0.7
Native HI / other Pacific Islander	2,921	0.1
Total SDFR	604,033	29.6
NonSDFR (nonHisp, White Men)	1,438,187	70.4
Total Primary Producers	2,042,220	100.0

^a There is one primary producer per farm. The primary producer is the principal operator in the 2012 Census. If multiple principal operators were reported on a farm, the primary producer was chosen by designating the person who made the most decisions for the farm (see USDA, NASS, 2019, page B-20).

^b Farm operations can be counted in multiple SDFR groups, such as a primary producer reporting as Hispanic African American or Asian women, or producers reporting two or more racial minority SDFR groups. Therefore, the total number of SDFR farms is less than the sum of the SDFR groups. A minority producer is a producer who identifies as Hispanic, American Indian or Alaskan Native, Black or African American, Asian, or Native Hawaiian or other Pacific Islander.

Source: USDA, NASS, 2012 Census of Agriculture and authors' calculations

Table 2. Primary Producers Identified by SDFR Status, 2012^{a,b}

SDFR Status	Number of SDFR	% of all primary producers
Women	288,264	13.7
Minority	159,715	7.6
Hispanic	67,000	3.2
Am Indian / Alaska Native	46,174	2.2
Black / African Am	34,570	1.6
Asian	14,735	0.7
Native HI / other Pacific Islander	2,190	0.1
Total SDFR	419,365	19.9
NonSDFR (nonHisp, White Male)	1,689,938	80.1
Total Primary Producers	2,042,220	100.0

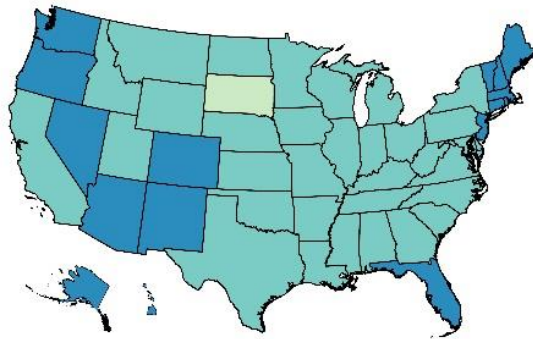
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^b Farm operations can be counted in multiple SDFR groups, such as a primary producer reporting as Hispanic African American or Asian women, or producers reporting two or more racial minority SDFR groups. Therefore, the total number of SDFR farms is less than the sum of the SDFR groups. A minority producer is a producer who identifies as Hispanic, American Indian or Alaskan Native, Black or African American, Asian, or Native Hawaiian or other Pacific Islander.

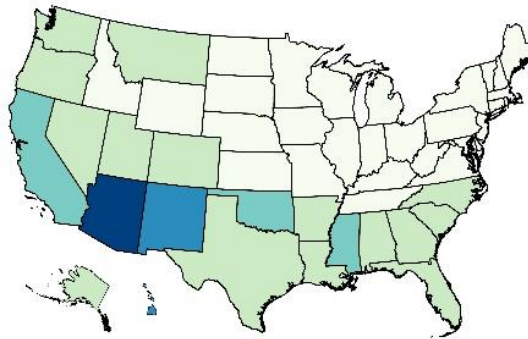
Source: USDA, NASS, 2012 Census of Agriculture and authors' calculations

Percent of farm operations by primary producer SDFR status and state, 2017^a

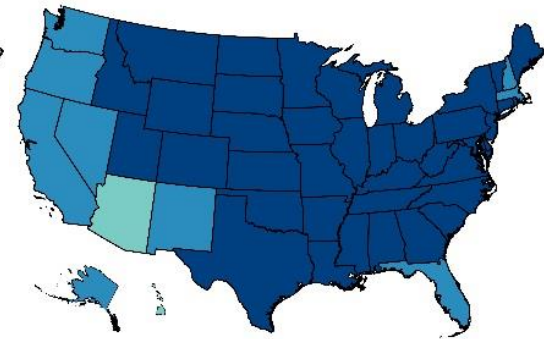
Women



Minority



Non-SDFR



Percent



- 1) Relatively small shares (23% or lower) of farms are women operated in the Midwest with South Dakota 15% to Michigan 23%
- 2) Very small shares (3% or less) of farms are minority operated in the Midwest with Iowa 1% to South Dakota 3%
- 3) Large shares (75% or greater) of farms are non-Hispanic White men operated in the Midwest with Michigan 75% to Minnesota 84%

Source: 2017 Census of Agriculture, authors' calculations, and Ahrendsen et al. 2022

Figure 1. Percent of farms operated by a beginning primary producer, by SDFR status, 2012 and 2017^a

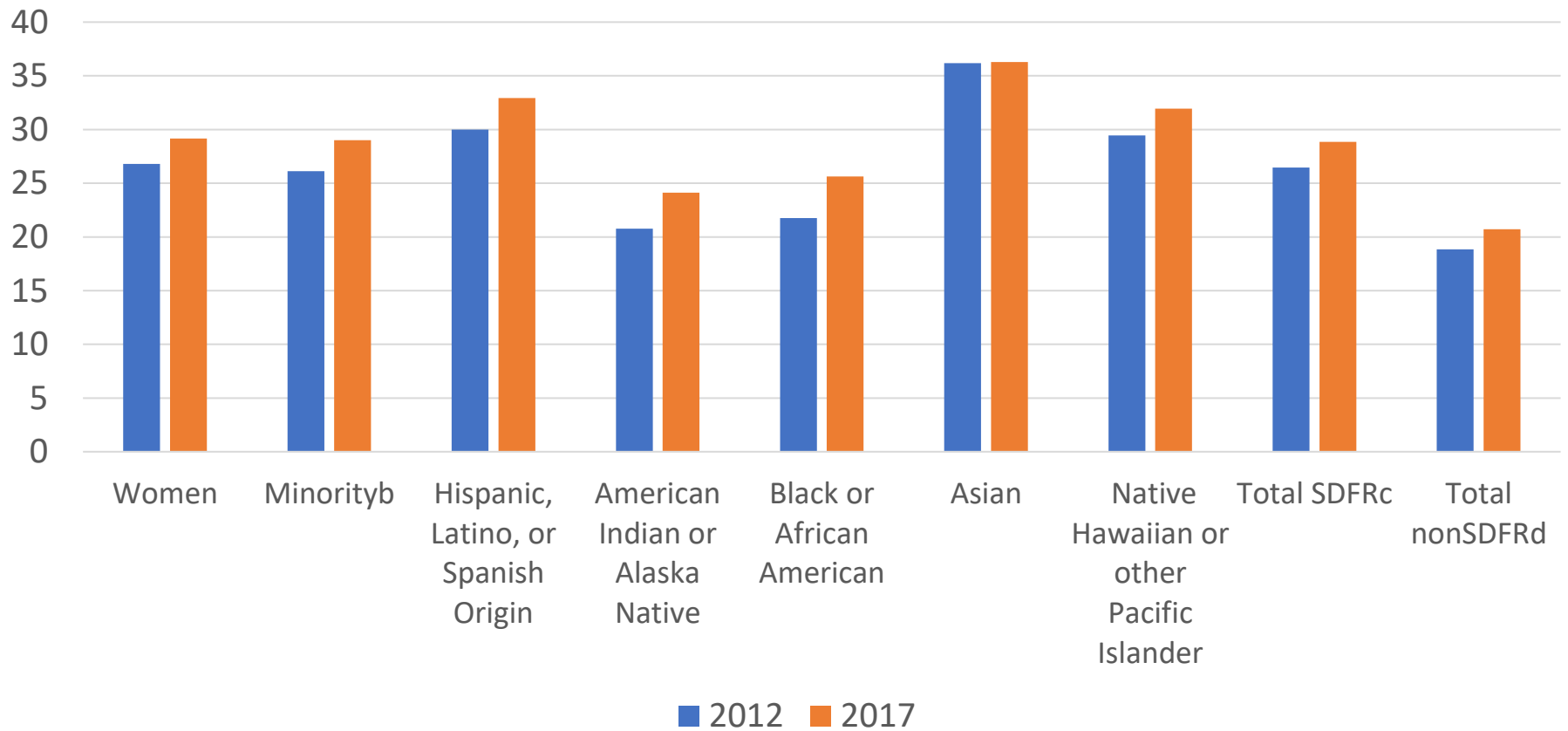
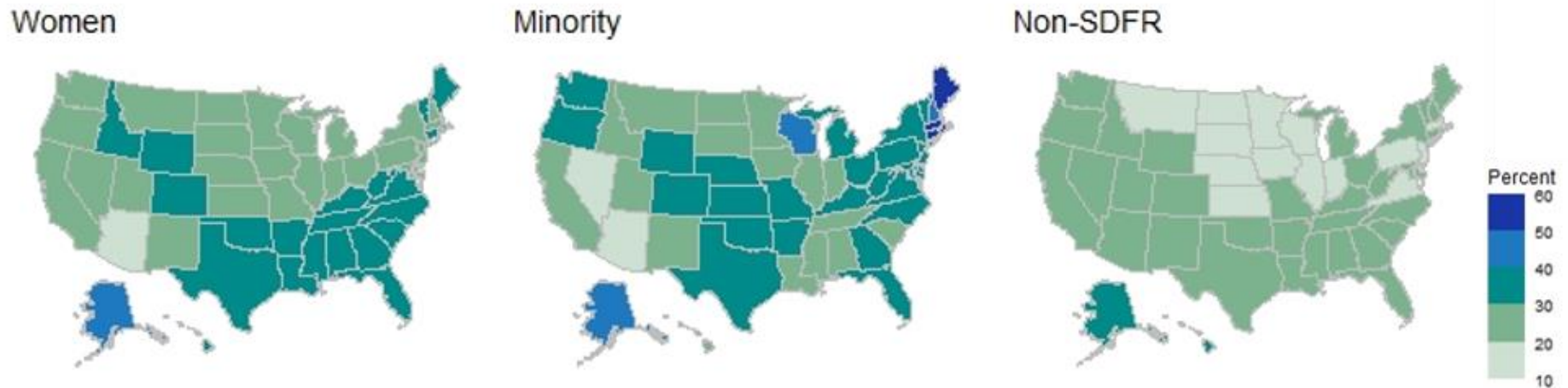


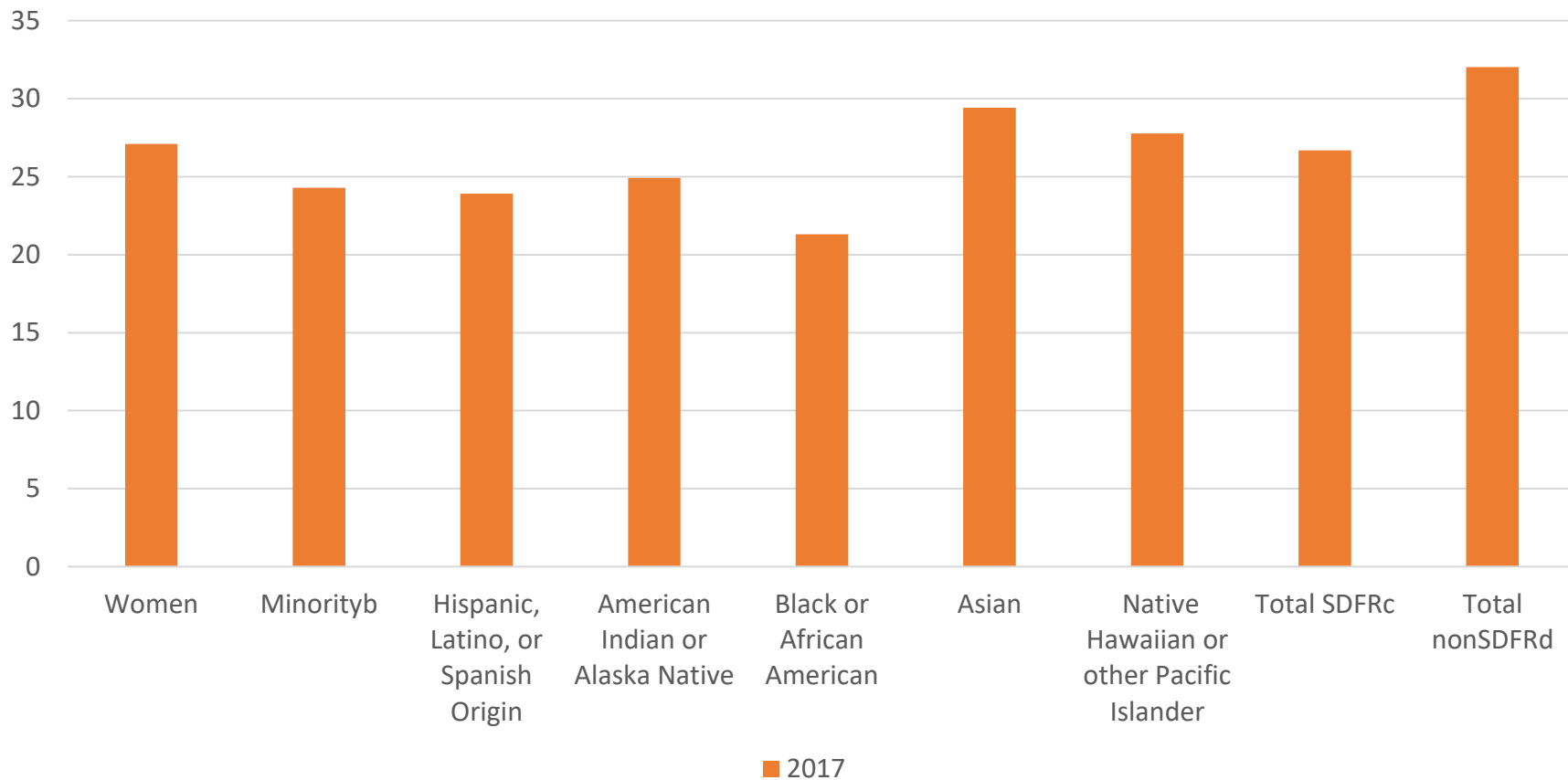
Figure 2. Percent of primary producer operated farms with a beginning primary producer, by SDFR status and state, 2017 ^a



- 1) Relatively large shares (30% and higher) of farms operated by women in the southern states are BFR;
Midwest: North Dakota 23% to Ohio 29%
- 2) Several New England states have quite large shares (50% and higher) of their minority-operated farms as BFR;
Midwest varies: South Dakota 24% to Wisconsin 41%
- 3) Relatively low shares (10% to 20%) of non-Hispanic White Man operated farms that have a BFR are in the highly agricultural Midwest and Northern Plains:
South Dakota 16% to Ohio 21%.

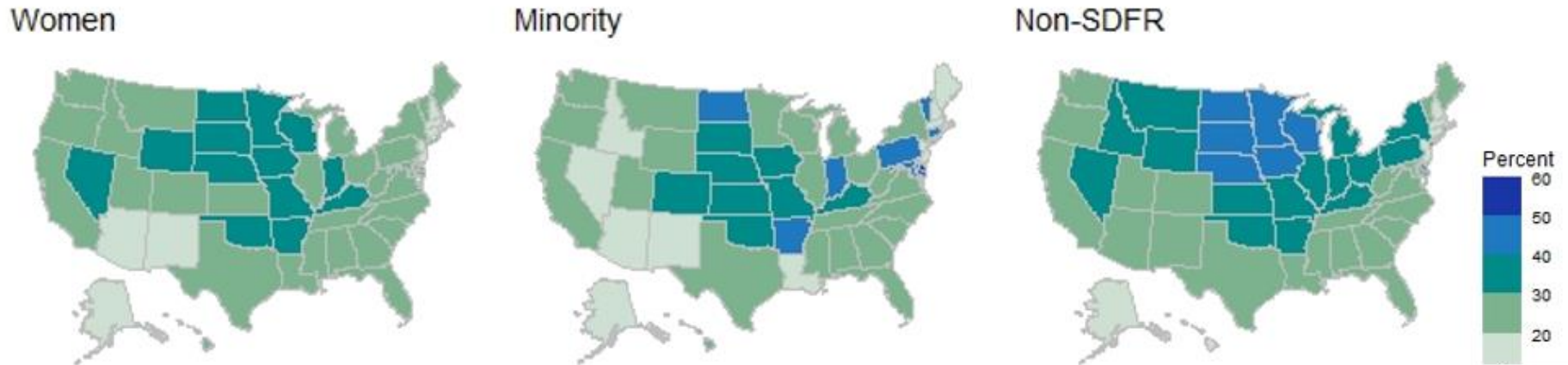
Source: 2017 Census of Agriculture, authors' calculations, and Ahrendsen et al. 2022

Figure 3. Percent of total beginning primary producer operated farms with interest paid, by SDFR status, 2017^a



Source: 2017 Census of Agriculture, authors' calculations, and Ahrendsen et al. 2022

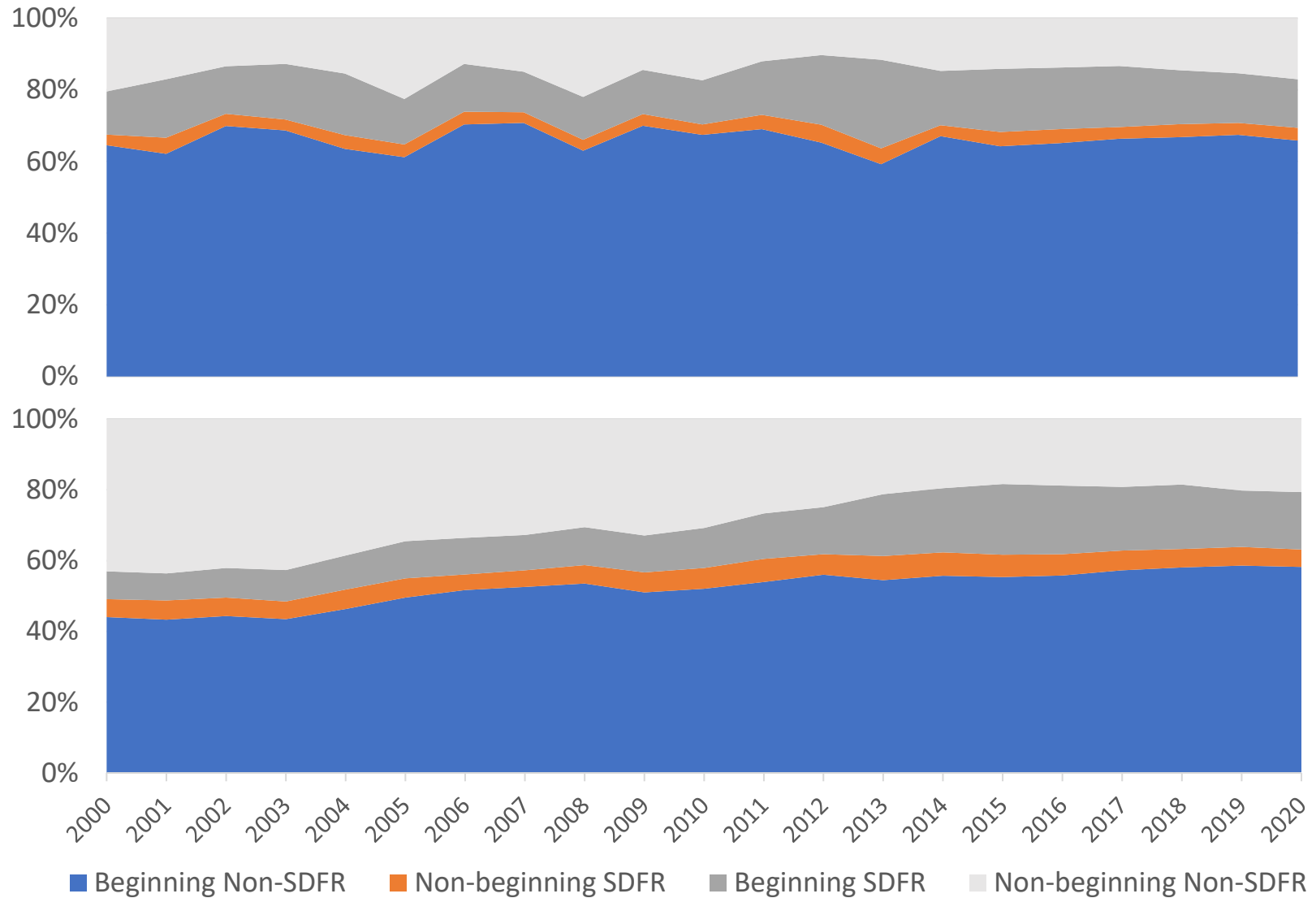
Figure 4. Percent of beginning primary producer operated farms reporting interest paid, by SDFR status and state, 2017^a



- 1) Women BFR and 3) non-SDFR BFR in the upper Midwest are relatively more likely to have agricultural debt, although Women BFR at lower levels.
- 2) Might not be a geographic pattern for BFR minority SDFR with interest paid, although several mid-Atlantic and northeastern states high shares (greater than 40%) of minority BFR with interest paid, possibly reflecting the more diverse agriculture (e.g. farm types, commodity types) in those regions.

Source: 2017 Census of Agriculture, authors' calculations, and Ahrendsen et al. 2022

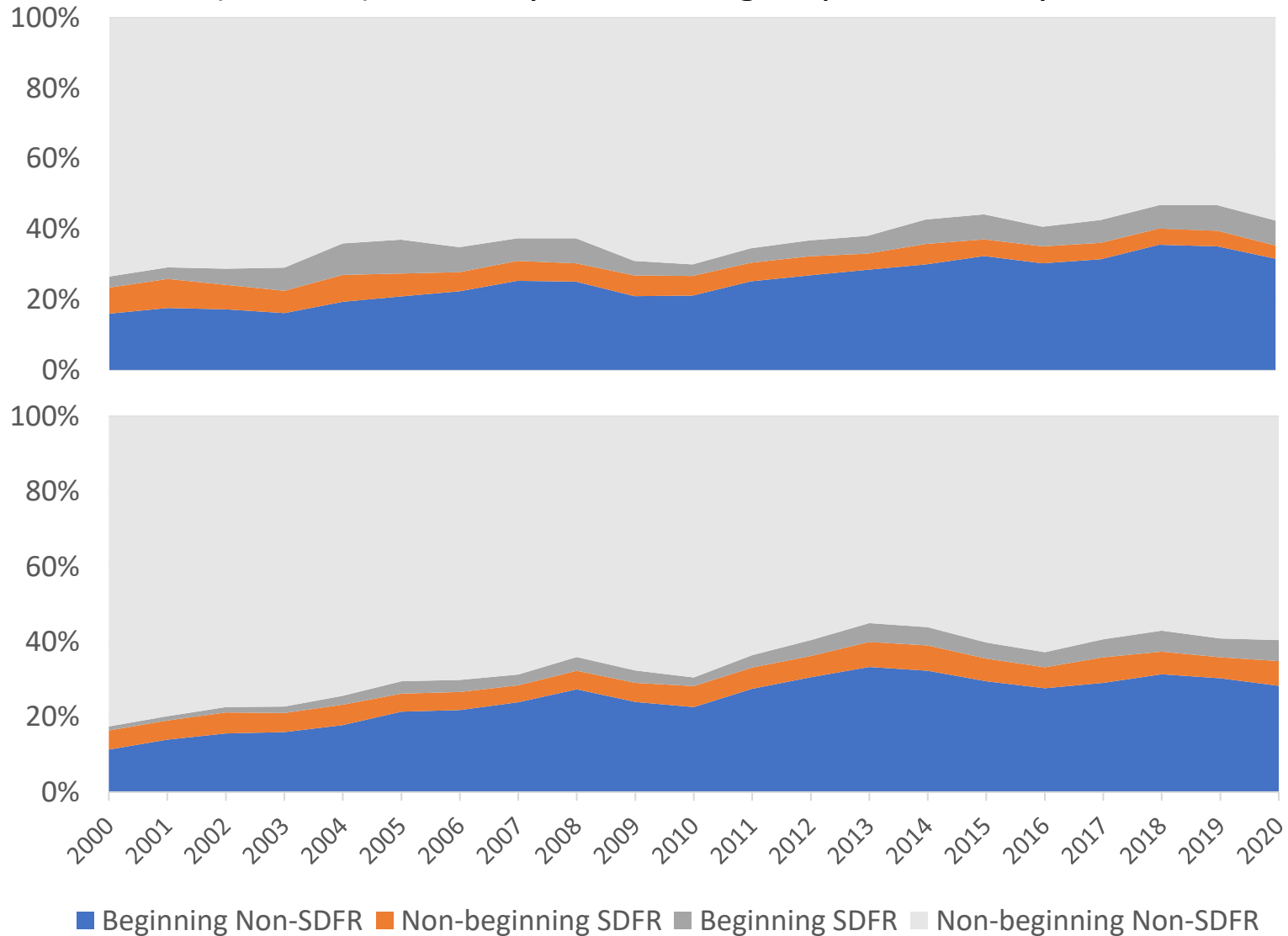
Figure 5. Share of direct farm ownership (top) and direct operating (bottom) loans, by borrower group and fiscal year



Beginning is a farmer with 10 or fewer years of experience operating any farm. A socially disadvantaged farmer or rancher (SDFR) is a woman or racial/ethnic minority. A non-SDFR is a nonHispanic, White man.

Source: USDA FSA OBFN database and Ahrendsen et al. 2022

Figure 6. Share of guaranteed farm ownership (top) and guaranteed operating (bottom) loans, by borrower group and fiscal year



Beginning is a farmer with 10 or fewer years of experience operating any farm. A socially disadvantaged farmer or rancher (SDFR) is a woman or racial/ethnic minority. A non-SDFR is a nonHispanic, White man.

Source: USDA FSA OBFN database and Ahrendsen et al. 2022

Percent of indebted farms with one or more FSA loans, 2018

	Direct	Guaranteed	Both	Any FSA loan
Part-time farm ^a	5.3	1.1	0.5	6.0
Small family farm ^b	8.2	3.5	1.0	10.7
Mid-size family farm ^c	8.5	10.6	2.4	16.6
Large family farm ^d	6.0	10.8	3.3	13.4
All farms	6.6	3.9	1.1	9.3

^aPart-time < \$100,000 and do not consider farming as primary occupation.

^bSmall is \$100,000 to \$350,000 of annual sales or less than \$100,000 in annual sales where the operator's primary occupation was farming.

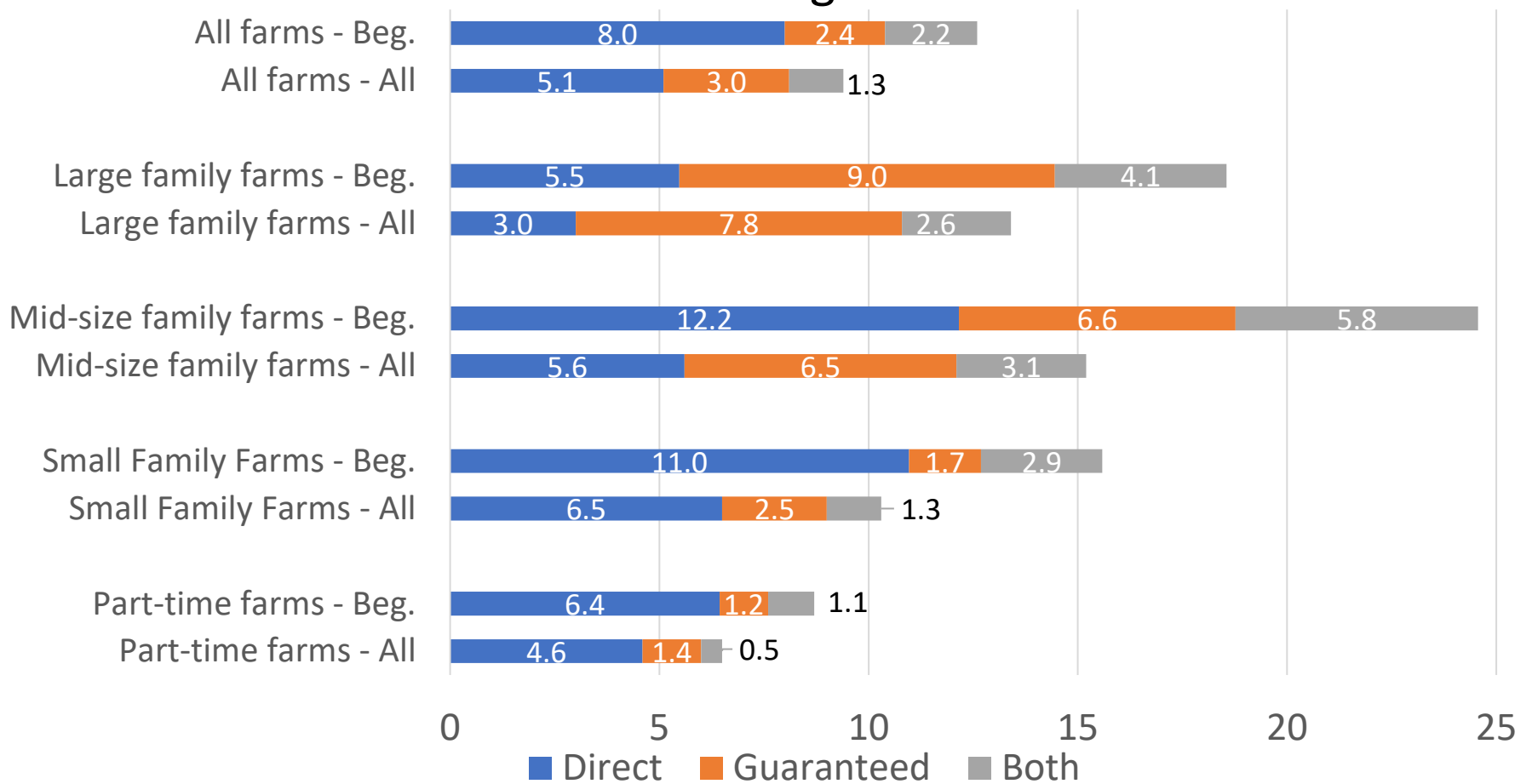
^cMid-size family farms had annual sales between \$350,000 and \$1 million.

^dLarge family farms had over \$1 million in sales. Non-family farms were excluded

Source: USDA ARMS and FSA Farm Loan Program data

- 1 in 6 indebted, mid-size family farms have one or more FSA loan
- 6.6% of indebted farms are directly impacted by an FSA loan
- 9.3% are directly and indirectly impacted

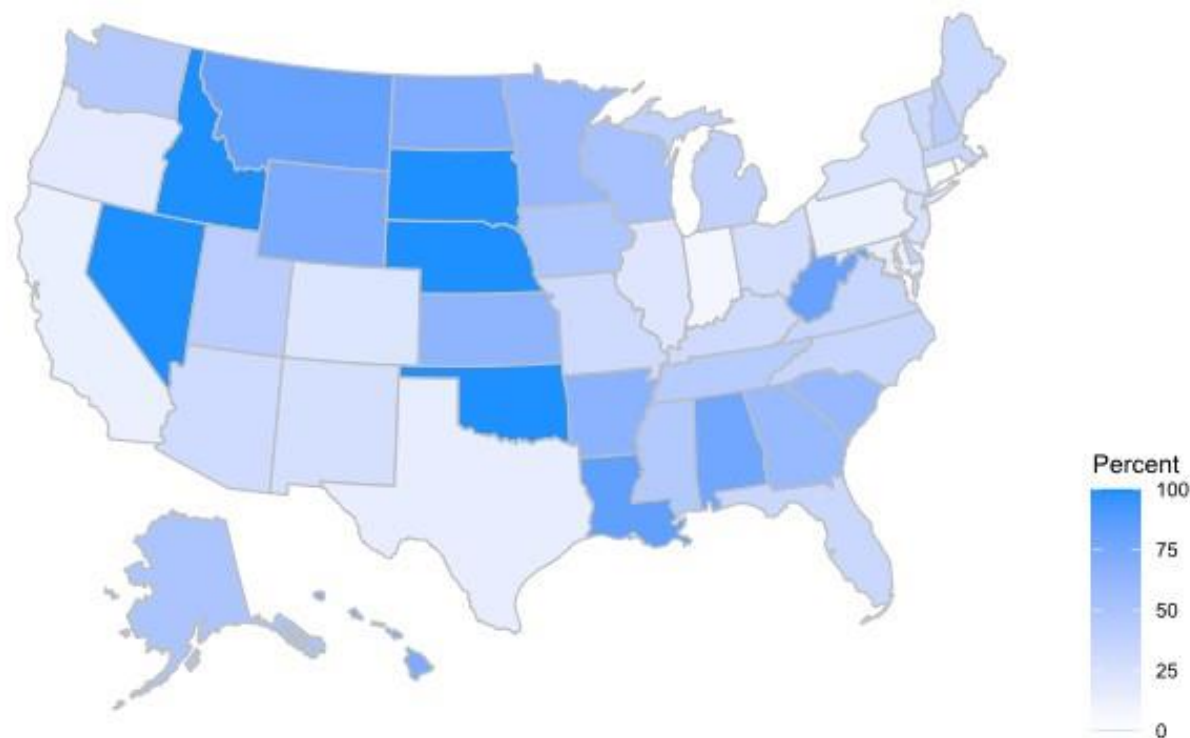
Figure 7. Percent of indebted farms receiving FSA credit, 2015-2018 average



Beginning (Beg.) is a farmer or rancher with 10 or fewer years of experience operating any farm. Large is a farm with over \$1 million in annual sales, mid-size is \$350,000 to \$1 million, small is \$100,000 to \$350,000 where the operator's primary occupation is farming, and part-time is less than \$100,000 where the operator does not consider farming as their primary occupation.

Source: USDA ARMS and FSA OBFN and GLS databases

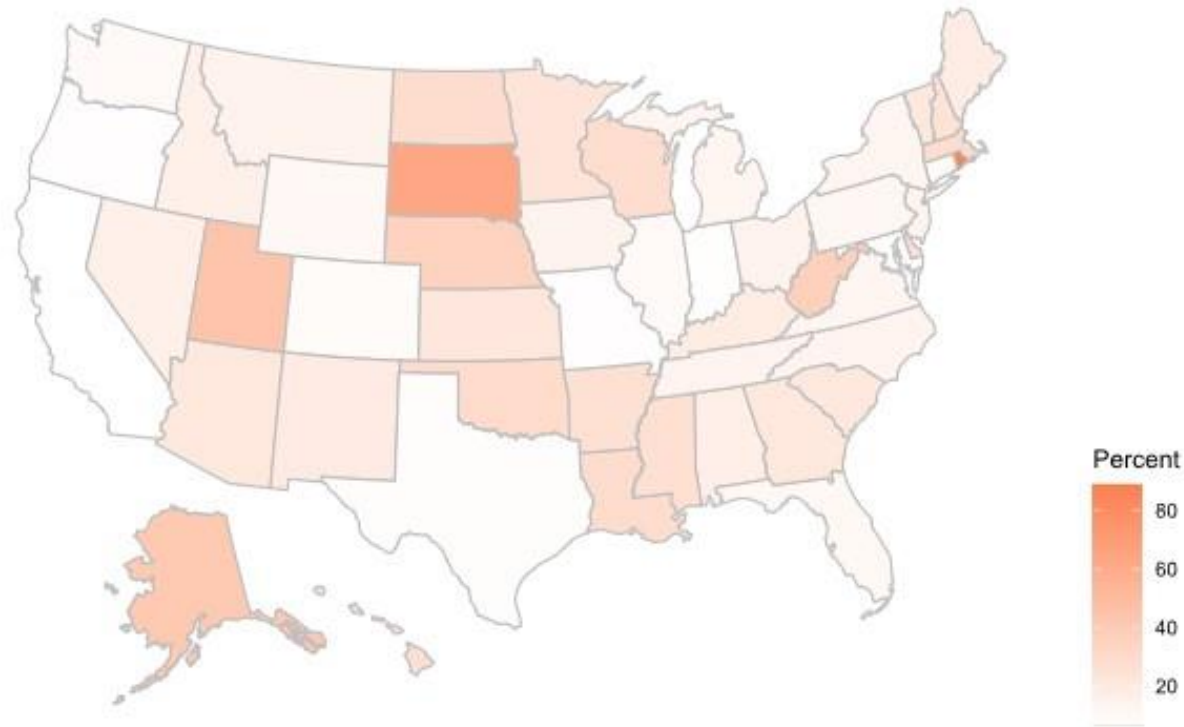
Figure 8. Percent of beginning primary producer minority-operated farms reporting interest paid that have FSA direct or guaranteed loans, by state, 2017^a



^a The percentages reflect multiple borrowers per farm may be included in the FSA data while there is only one primary producer per farm in the Census of Agriculture data. In the 2017 Census of Agriculture, the primary producer is a principal operator. If multiple principal operators were reported on a farm, the primary producer was chosen by designating the person who made the most decisions for the farm (see USDA, NASS, 2019, page B-20). A minority producer is a producer who identifies as Hispanic, American Indian or Alaska Native, Black or African American, Asian, or Native Hawaiian or other Pacific Islander. A beginning primary producer has 10 or fewer years of experience operating any farm.

Sources: numerator is from FSA Farm Loan Program data and the denominator is from the 2017 Census of Agriculture

Figure 9. Percent of beginning primary producer women-operated farms reporting interest paid that have FSA direct or guaranteed loans, by state, 2017^a



^a The percentages reflect multiple borrowers per farm may be included in the FSA data while there is only one primary producer per farm in the Census of Agriculture data. In the 2017 Census of Agriculture, the primary producer is a principal operator. If multiple principal operators were reported on a farm, the primary producer was chosen by designating the person who made the most decisions for the farm (see USDA, NASS, 2019, page B-20). A woman producer is a producer who identifies as female. A beginning primary producer has 10 or fewer years of experience operating any farm.

Sources: numerator is from FSA Farm Loan Program data and the denominator is from the 2017 Census of Agriculture

Results

- Large increase in the number of woman-operated farms from 2012 to 2017, which almost fully explains the change in number of SDFR-operated farms
- Share of beginning-operator farms increased from 2012 to 2017 regardless of the SDFR status, with Asian having the greatest share and Black, American Indian, & non-Hispanic White men smallest shares
- Shares of operations with a BFR vary geographically by SDFR status
 - Relatively large shares (30% and higher) of farms operated by women in the southern states are BFR
 - Several New England states have quite large shares (50% and higher) of their minority-operated farms as BFR
 - Relatively small shares (10% to 20%) of non-Hispanic White Man operated farms that have a BFR are in the highly agricultural Midwest and Northern Plains

Results

- Shares of BFR operations with interest paid
 - Decreased for all SDFR statuses, except Native HI / other PI
 - Women have a greater share than Minority, but non-Hispanic White men have the largest share and Black producers have the smallest share
 - Women BFR and non-Hispanic White Men BFR in the upper Midwest are relatively more likely to have agricultural debt, although Women BFR at lower levels
 - No strong geographic pattern for BFR minority SDFR with interest paid, although several mid-Atlantic and northeastern states have high shares (greater than 40%) of minority BFR with interest paid, possibly reflecting the more diverse agriculture (e.g. farm types, commodity types) in those regions.

Results

- FSA loans since 2013
 - Over 80% of farms receiving FSA direct operating and farm ownership loans were members of a targeted group with over 60% non-SDFR beginning farmers. Most direct SDFR borrowers were also beginning.
 - Guaranteed programs have fallen slightly below the statutory targets of 40% with about a third of new guaranteed borrowers being beginning or members of a historically underserved group. About half of the SDFR guaranteed borrowers were also BFR.
- FSA loans to indebted farms, average 2015-2018
 - 5.1% of indebted farms are directly impacted by an FSA loan
 - 8.0% for BFR
 - 9.4% are directly or indirectly impacted
 - 12.6% for BFR
 - 1 in 6 indebted, mid-size family farms have one or more FSA loan
 - 1 in 4 for mid-size BFR (1 in 6 for large BFR)

Results

- FSA penetration of beginning SDFR farms (number of beginning SDFR FSA borrowers relative to the number of total beginning SDFR farms) is very high
 - Penetration rates for Minority operated farms:
 - 20 states over 50% and 33 states over 30%
 - Primary minority group appeared to be a major factor; highest ratios tended to be located in the Plains and Mountain West, regions where American Indians tend to be the most prominent minority.
 - States where Hispanics are the primary minority, Texas, California, and New Mexico, less than 27%, placed among the lowest 10 states.
 - Woman operated farms: less reliant on FSA credit programs compared to minorities
 - Only 7 states over 33%
 - Many higher penetration ratio states were in the Plains or Mountain West. An explanation may be that the presence of minorities in these areas facilitates outreach activities.

Summary

- Some progress toward facilitating entry of beginning farmers, especially among historically underserved groups
- FSA direct and guaranteed credit programs appear to be crucial in enabling targeted groups (BFR and SDFR) to access loans
 - However, the programs may not be as effective at correcting historical inequities. The potential effects of alleged discrimination on SDFR *exit* from farming are well beyond the scope of this presentation but important to acknowledge.
 - In 2017, nearly 75% of all SDFR did not utilize debt, raising the question of whether SDFR farmers might still be underserved.

Future Considerations

- Possible system-wide explanations for differences in loan utilization could include
 - Farm structural differences
 - Differences in the structure of banking (fewer lenders providing farm loans can result in informational asymmetries)
 - Regions with higher minority populations are more likely to have resources devoted toward outreach
 - In regions with fewer targeted group members, FSA and Extension could encourage or facilitate coordination of outreach across states or along functions that may appeal to new entrants (*e.g.* smaller scale, urban agriculture, organic, or farm-to-table).

Future Considerations

– Farmer-level factors

- Could lack of debt utilization be a business choice or barriers like lack of outreach or result of insufficient creditworthiness
- Smaller farms may be able to cash-flow using off-farm income
- Farm models, such as community supported agriculture, offer an alternative approach to raising capital
- Could alternative loan products with monthly payments better align with monthly wage earners

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