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United States Department of Agriculture

# Financial assistance for farm operations and farm households in the face of COVID-19

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*The findings and conclusions in this presentation have not been formally disseminated by the U.S. Department of Agriculture and should not be construed to represent any determination or policy.*

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# Background

USDA forecast of 2020 cash receipts

- February 2020 (pre-pandemic): \$384 billion
- September 2020 (post-pandemic): \$358 billion

COVID-19 related direct payments

- Total payments to farm households: approx. \$28 billion

- **Farm operation shock**

- Supply disruptions
- Decreased demand

- **Farm household shock**

- Increased off-farm unemployment



# Purpose and Limitations

**Objective: Explore the distribution of COVID-19 shock and relief for the agricultural sector and farm households by commodity.**

**Limitations:**

*There are many limitations (adverse weather, trade impacts, etc.) in using this as an indicator of the COVID-19 shock to farm operations. This does provide a glimpse into how expected incomes have changed over the year and how that compares with federal support.*



# COVID-19 shocks to farm operation and household

## Methods:

Use difference between the 2020 ERS Farm income forecast released in February 2020 and September 2020 to measure the shock i.e. the shock is measured as the expected decrease in cash receipts from February to September forecast.

*Shock = 2020 February Farm income forecast - 2020 September Farm income forecast*

*It is important to note that change in cash receipts (value of production) during this time was not solely due to COVID, since the market experienced other shocks, especially trade impacts.*



# COVID-19 federal direct payments

Four economic stimulus bills were passed, some with programs targeted at the farm business and some for which farm businesses and households were eligible.

USDA Program:

Coronavirus Food Assistance Program (CFAP)

Non-USDA Programs:

Paycheck Protection Program (PPP)

Economic Impact Payments (EIP)

Federal Pandemic Unemployment Compensation (FPUC).

Estimate the total and distribution using simulations and the 2018 ARMS, and data from SBA and BLS.



# Total simulated direct payments

<b>Program</b>	<b>Amount (\$ billions)</b>
<b>COVID-19 related direct payments</b>	
Coronavirus Food Assistance Program (CFAP)	16
Paycheck Protection Program (PPP)	5.8
Economic Impact Payments (EIP)	4.4
Federal Pandemic Unemployment Compensation (FPUC)	1.4
<b><i>Total COVID-19 related direct payments</i></b>	<b>27.6</b>
<b><i>Total Non-COVID-19 related direct payments</i></b>	<b>15.3</b>
Net indemnities	5.4
<b>Total Direct Support</b>	<b>48.3</b>

# CFAP targeting is based on commodity price declines

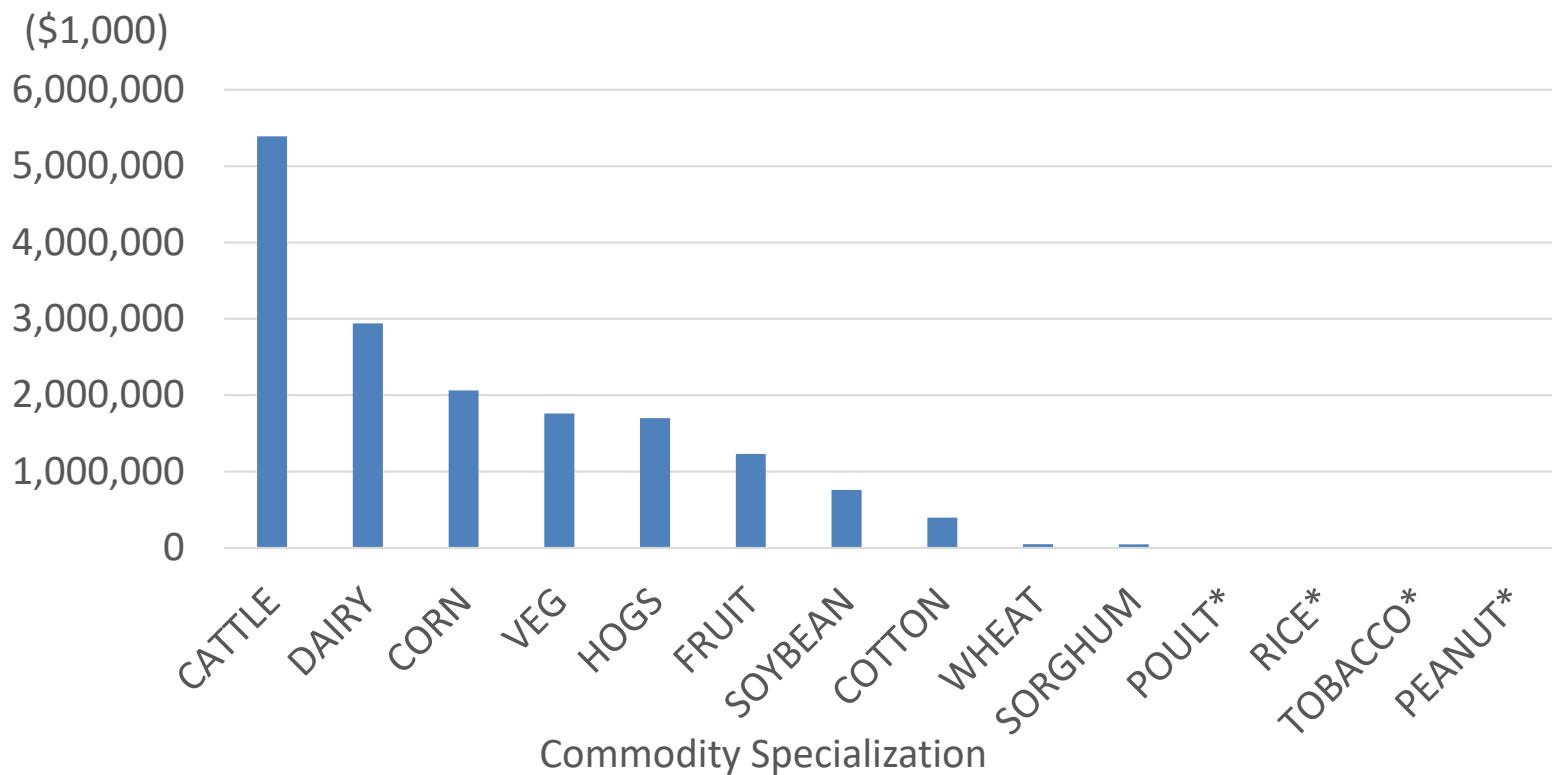
Commodity	Cash receipts <sup>8</sup> (\$1,000)	Share of total cash receipts (percent)	Estimated CFAP funding (\$1,000)	Share of total CFAP payment (percent)
All commodities	370,226,077	100	16,000,000	100
All eligible animals and animal products	127,807,522	35	10,029,624	63
All ineligible animal and products	47,736,517	13	0	0
All eligible crops	146,198,773	39	5,970,376	37
All ineligible crops	48,483,265	13	0	0

Data sources: USDA, Economic Research Service, Farm Income and Wealth Statistics, farmers.gov, and authors' calculations





# Simulation of CFAP targeting criteria



Source: USDA, Economic Research Service, Farm Income and Wealth Statistics, 2018 ARMS, and authors' calculations

\* Data unavailable or not qualified.



# PPP targeting is based on income and payroll

Estimated PPP loan for four categories of commercial farms

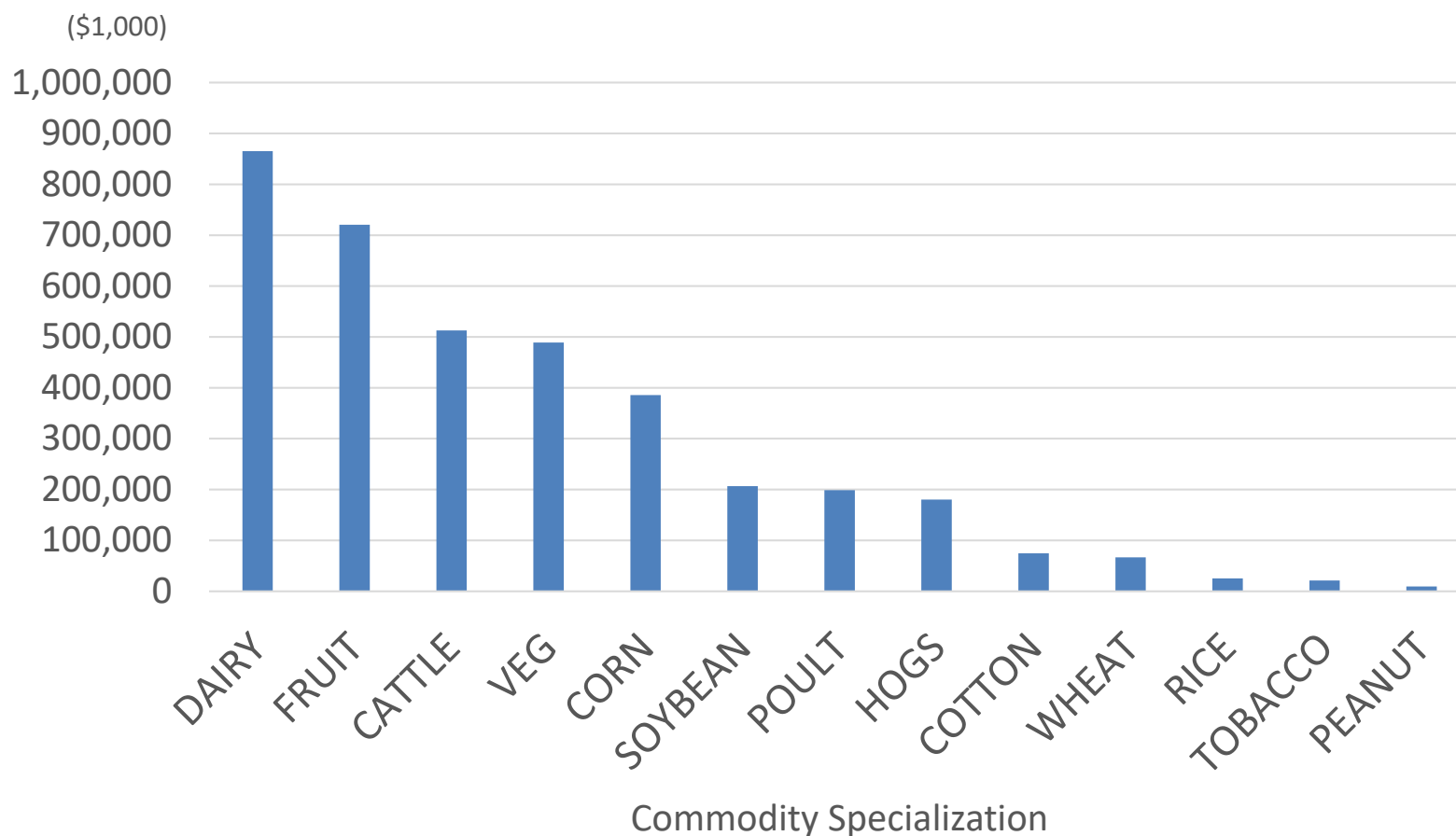
Category (Farm operations with)	Share of operations	Estimated PPP by farm type (in millions)
Positive income and positive payroll <i>(Eligible)</i>	18%	\$3,507
Positive income and no payroll <i>(Eligible)</i>	47%	\$1,746
Negative income and positive payroll <i>(Eligible)</i>	9%	\$572
Negative income and no payroll <i>(Ineligible)</i>	27%	\$0
<b>Total</b>	<b>101</b>	<b>5,825</b>

Note: Due to rounding, numbers may not add to 100%.

Data source: USDA, Economic Research Service and authors' simulation using 2018 ARMS.



# Simulation of PPP targeting criteria



Source: USDA, Economic Research Service, Farm Income and Wealth Statistics, 2018 ARMS, and authors' calculations



# EIP targeting is based on AGI and number of dependents

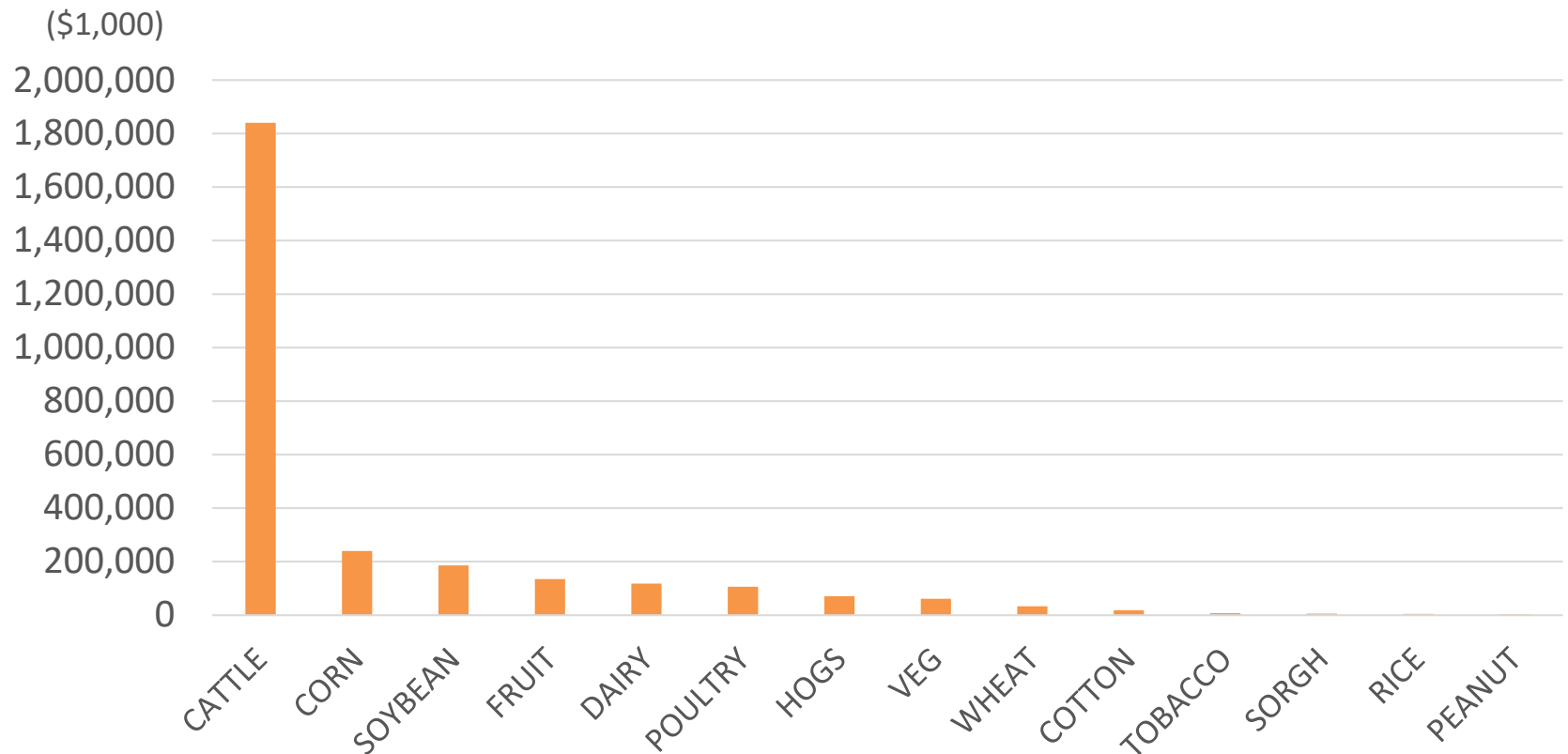
Estimated Economic Impact Payments (EIP) for farm households

Household filing status	Proportion of households receiving EIP	Median AGI (\$)	Median EIP (\$)	Average EIP (\$)	Total Estimated EIP (\$ billions)
Joint	0.91	70,108	2,400	2,573	3.86
Single	0.81	34,552	1,200	926	0.21
HOH	0.88	60,511	2,347	2,691	0.32
All Farm Households	0.89	65,003	2,400	2,375	4.39

Data source: USDA, Economic Research Service and authors' simulations using 2018 ARMS.



# Simulation of EIP targeting criteria



Source: USDA, Economic Research Service, 2018 ARMS, and authors' calculations



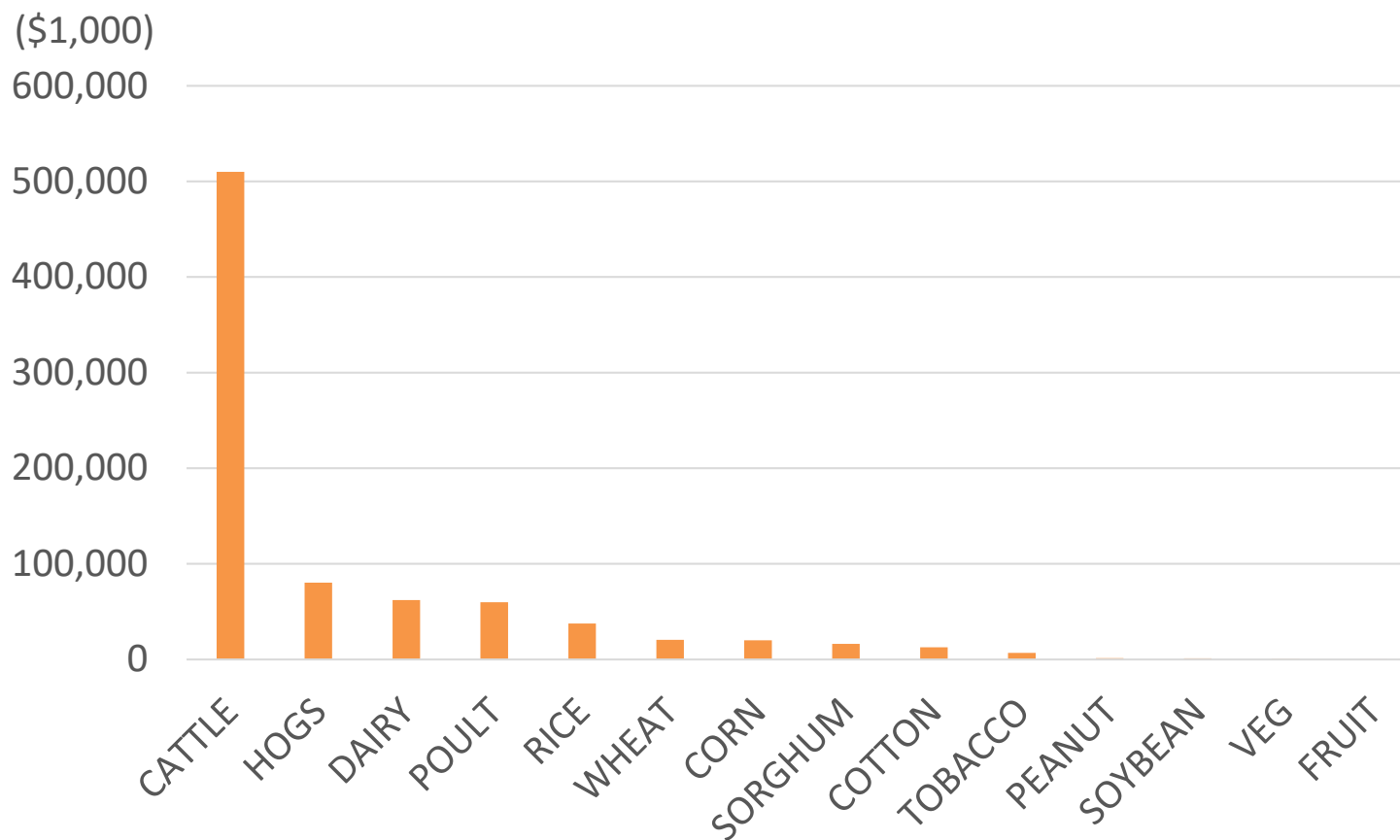
# FPUC targeting criteria is based on unemployment due to COVID-19

	Share of farm households	Average $E[FPUC]$ (\$)	Total $E[FPUC]$ (\$ billion)
Have 0 off-farm labor	0.29	0	0
Have 1 off-farm laborer	0.37	626	0.42
Have 2 off-farm laborers	0.28	1,216	0.69
Have More than 2 off-farm laborers	0.06	1,995	0.25
All farm households	1.00	996	1.37

Data source: USDA, Economic Research Service, ARMS 2018, US Department of Labor, Bureau of Labor Statistics, LAUS and authors' simulation.



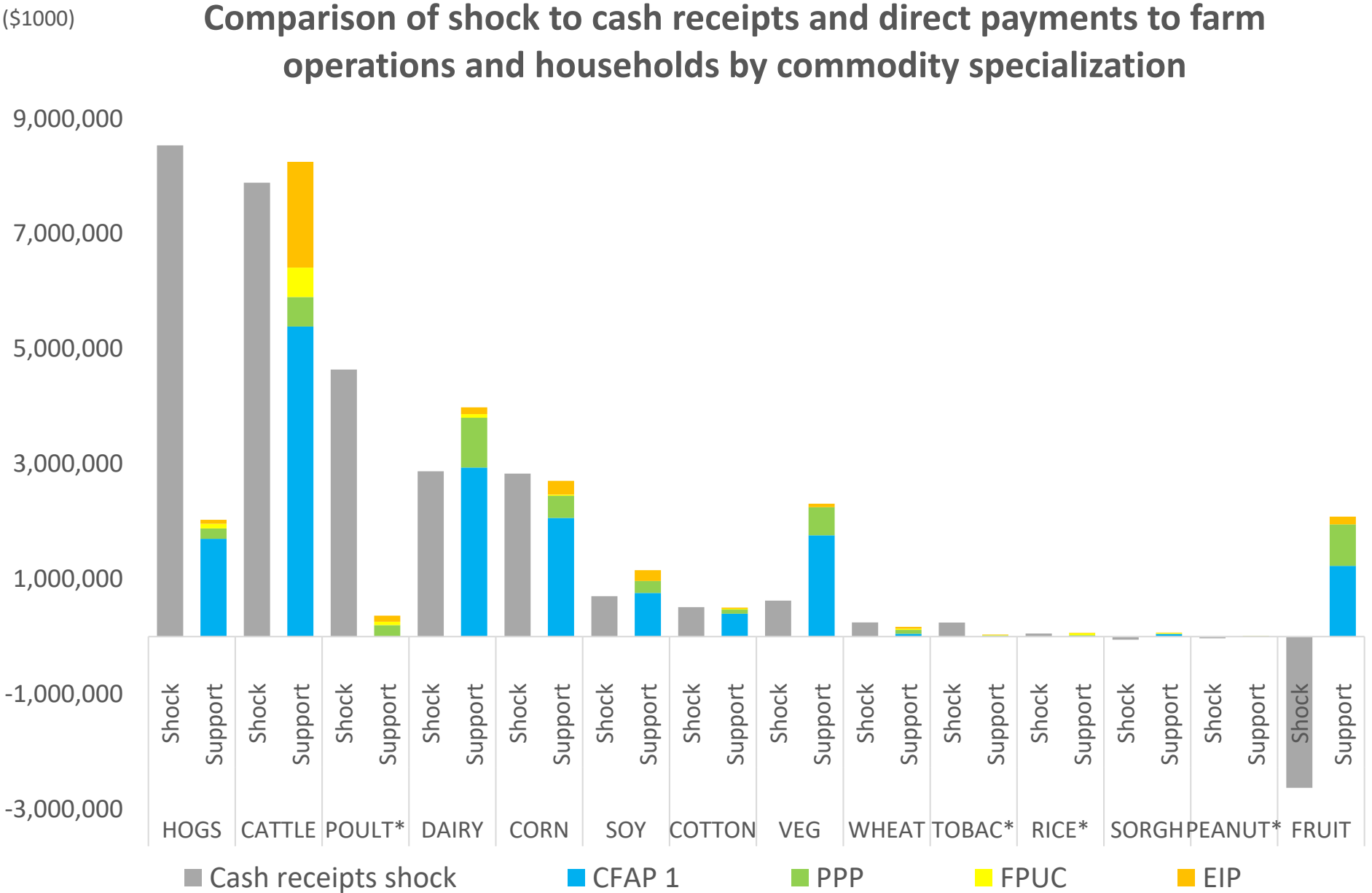
# Simulation of FPUC targeting criteria



Source: USDA, Economic Research Service, 2018 ARMS, LAUS, and authors' calculations



# Comparison of shock to cash receipts and direct payments to farm operations and households by commodity specialization



\* Data on CFAP payments unavailable or the commodity was not eligible

Shock calculated as the difference in 2020 cash receipts forecast released in Feb 2020 and Sept 2020

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics, 2018 ARMS, farmers.gov, SBA,, and authors' calculations

*The cash receipts declines may also be due to non-COVID factors, since the market experienced other shocks, especially trade impacts..*



# Conclusion

- COVID-19 related direct payments to farm operations and households are expected to total \$27.6 billion with \$21.8 billion going to farm operations and \$6.0 billion going to farm households.
- The revision in the farm income forecasts suggests a decrease in cash receipts of approximately \$26 billion.
- *There are many limitations in using this as an indicator of the COVID-19 shock to farm operations. However, this does provide a glimpse into how expected incomes have changed over the year and how that compares with federal support.*



# Questions?

