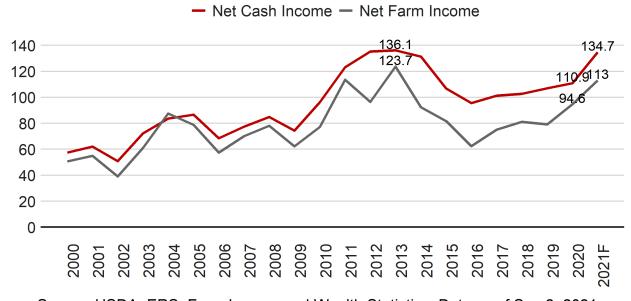
Are Ohio farmers expected to receive higher farm income in 2021?

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US farm income expected to rise in 2021

The United States Department of Agriculture (USDA) has released its revised forecasts of US farm income for 2021 on September 2, 2021 (U.S. Department of Agriculture 2021). Net farm income, a broad measure of farm sector profits, is forecast at \$113.0 billion in 2021, an increase of 19.5% from \$94.6 billion in 2020 (Figure 1). Net cash farm income, another measure of farm sector profit, is forecast to increase by 21.5%, from \$110.9 billion in 2020 to \$134.7 billion in 2021. National trends of rising farm income and commodity cash receipts suggest that Ohio farmers can expect to receive higher incomes in 2021.

US net farm income and net cash income, 2000-2021 (in billion \$)



Source: USDA, ERS, Farm Income and Wealth Statistics, Data as of Sep 2, 2021

Figure 1: US farm incomes, 2000-2021

What factors are contributing to the growth in net farm income?

The increase in net farm income is driven mainly by an increase in crop cash receipts and livestock cash receipts. Crop cash receipts are forecast to increase by 19.7% (up \$37.9 billion) from 2020. Much of the increase in crop cash receipts come from three major crops: corn (up \$20.1 billion), soybeans (up \$16.3).

billion), and wheat (up \$2.2 billion), as higher prices prevail for these commodities. Total animal/animal product cash receipts are forecast to increase by \$26.5 billion to \$191.5 billion in 2021. Major animal products such as hogs, cattle and calves, and broilers are expected to have higher cash receipts in 2021.

The increase in cash receipts is somewhat moderated by a fall in direct government payments and increased production expenses (Figure 2). Direct government farm payments include federal farm program payments paid directly to farmers and ranchers. At \$45.7 billion, farmers received record high level of direct government payments last year, mainly in the form of pandemic assistance. As the impact of the pandemic recedes, these payments are supposed to go down. Direct government payments for 2021 are forecast at \$28 billion, down by \$17.7 billion from last year. The discontinuation of the trade war-era Market Facilitation Program (MFP) payments also contributed to the decline in direct government payments. Total production expenses are forecast to increase by 7.3% (\$26.1 billion in nominal terms) in 2021 to \$383.5 billion.

Changes in net farm income components in 2021 (in billion \$) 5.7 -1.6 150 37.9 26.1 2.5 113 -17.7 94.6 100 50 0 Livestock Crop NFI Crop Livestock Production Government Farm-related inventory inventory 2020 receipts receipts expenses payments income 2021 change change NFI Decrease Increase

Figure 2: Factors contributing to the rising net farm income

Source: USDA, ERS, Data as of Sep 2, 2021

How much farm income can Ohio farmers expect to receive in 2021?

USDA also published the first official estimates of farm income received by farmers in Ohio in 2020. Ohio net farm income for 2020 was estimated at \$2.7 billion. While USDA has not published forecasts for Ohio farm income for 2021, the national trends suggest that farm income for Ohio farmers will also likely increase in 2021, as Ohio net cash income and net farm income usually follow the national trend (Figure 4). Moreover, this year, the US farm income growth is mainly driven by increased cash receipts from commodities, including corn, soybean, and cattle and calves, all of which are important commodities in Ohio (Figure 3). The bullish outlook of commodity prices of corn and soybeans and rising export demand suggests that Ohio farmers are likely to receive bumper cash receipts this year.

Early farm income forecasts tend to be conservative

The net cash income and net farm income forecasts released on September 2, 2021 are revised upward from the initial forecasts for 2021 which were published in February 2021. The February forecasts put net cash income and net farm income at \$128.3 billion and \$111.4 billion, which were revised upward with the September forecasts. Previous studies have shown that the initial estimates of farm income often tend to be downward

Cash receipts for selected commodities, (in billion \$)

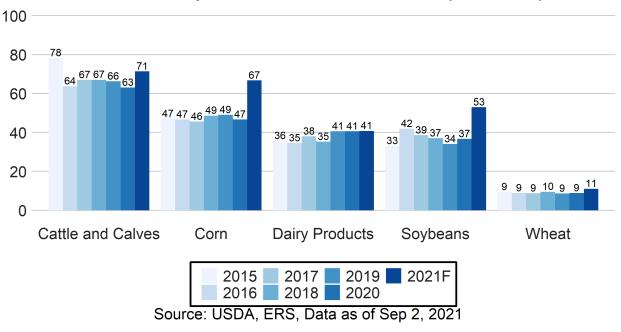


Figure 3: Factors contributing to the rising net farm income

Ohio net farm income and net cash income, 2000-2020 (in billion \$)

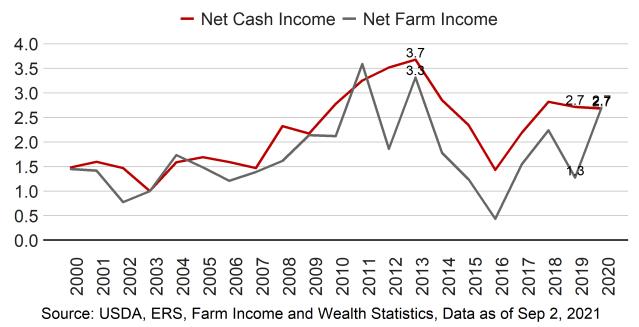


Figure 4: Ohio farm incomes, 2000-2021



biased (Isengildina-Massa et al. 2021). A recently published paper by Siddhartha Bora and Ani Katchova from the Department of Agricultural, Environmental and Development Economics (AEDE), The Ohio State University, and Todd Kuethe from Purdue University investigates the reason behind the persistent downward bias in the initial estimates of net cash income and its components and attributes it to the potential high costs associated with overprediction (Bora, Katchova, and Kuethe 2021). Given the evidence of the conservative nature of the early estimates, farmers have more reasons to be optimistic about their final realized farm income for 2021.

References

Bora, Siddhartha S., Ani L. Katchova, and Todd H. Kuethe. 2021. "The Rationality of USDA Forecasts Under Multivariate Asymmetric Loss." *American Journal of Agricultural Economics* 103 (3): 1006–33. https://doi.org/https://doi.org/10.1111/ajae.12142.

Isengildina-Massa, Olga, Berna Karali, Todd H Kuethe, and Ani L Katchova. 2021. "Joint Evaluation of the System of USDA's Farm Income Forecasts." *Applied Economic Perspectives and Policy*.

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