



Interpreting USDA's November Farm Income Forecast

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Introduction

On November 29, 2017, the USDA's Economic Research Service released an updated projection of 2017 net farm income. The forecast of \$63.2 billion is \$200 million (0.3%) lower than the forecast released in August. The updated forecast suggests that net farm income will exceed the 2016 estimate (\$61.5 billion) by \$1.7 billion (2.8%). This post shows that the November net farm income forecast is expected to be a good predictor of realized net farm income for 2017, based on historic forecast data.

Net Farm Income

Net farm income is the official U.S. Government estimate of farming's contribution to the national economy. The USDA **defines** net farm income as "the residual income leftover after all the factors of production are paid. It represents the returns for operator labor, management, and equity, as well as any other unpaid resources used for farm production instead of elsewhere." For more information on USDA's net farm income forecasts, see our previous *farmdoc daily* articles from [August 25, 2017](#) and [August 31, 2017](#).

November Forecast History

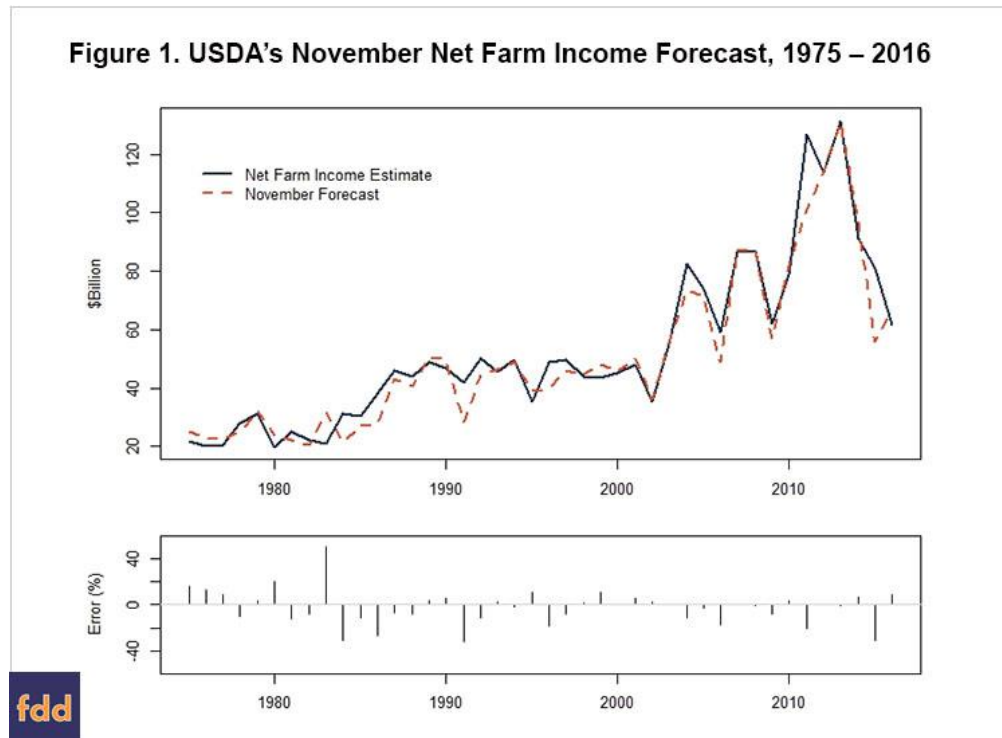
As previously stated, the November forecast revision is slightly more pessimistic than the previous revision released on August 30, 2017 (\$63.2 billion compared to \$63.4 billion). This is not uncommon. Between 1975 and 2016, the November forecast was less than the August forecast nearly half (46.5%) of the time. However, the change between the August and November forecasts in 2017 was much more modest than we typically observe. In recent years, the change between the August and November forecasts ranged between -14.4% (2014) and +8.6% (2013).

The figure below plots the USDA's November net farm income forecast from 1975 – 2016, along with the official estimates and their associated (percentage) errors. The figure shows that the USDA's November

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forecast is as likely to under-predict or over-predict net farm income, with both occurring 50 percent of the time.

The forecast errors for the November forecast are typically quite small. Between 1975 and 2016, the forecast error averaged -2.4% , but this difference is not statistically significant. In other words, the difference between the November forecast values and realized net farm income could reasonably be explained by chance occurrence. Thus, an economist would say that the November forecast is “an unbiased predictor” of realized net farm income. However, the November forecast drastically under-predicted realized values in a few years: 1984 (-30.6%), 1991 (-32.1%), and 2015 (-31.0%), and the November forecast drastically over-predicted realized values in 1983 (50.0%).



Conclusions

The USDA's November 29, 2017 forecast of 2017 net farm income, at \$63.2 billion, showed little change from the August projection. Based on the historic performance of the November forecast revisions, this projection is expected to be a good predictor of realized net farm incomes. The USDA will release one more revision of the 2017 net farm income forecast in February 2018, and the 2017 official estimates will be released in August 2018.

References

Kuethe, T., T. Hubbs, and D. Sanders “[Interpreting USDA's Recent Farm Income Forecast](#)” *farmdoc daily* (7): 160, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 31, 2017.

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