

FINANCIAL STATUS OF **BEGINNING FARMERS**

APRIL 2022

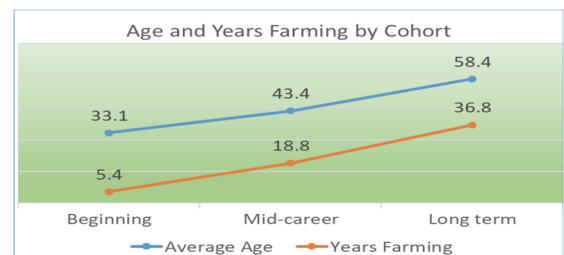
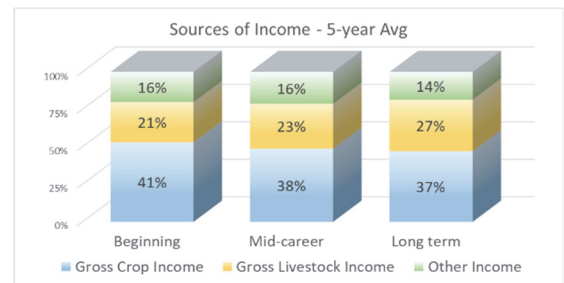


Financial Status of Beginning Farmers in Minnesota

Farming has always been a challenge when you consider weather, livestock production, markets and financial risks. Beginning farmers tend to have additional challenges compared to more experienced farmers. This document is designed to highlight the financial status of beginning farmers as they navigate through the pressures of operating and growing their farm business while competing with farmers having many more years of experience. This report will show that Beginning Farmers, compared to experienced farmers, have an elevated vulnerability to the factors above.

Demographics

Data was provided by MN farmers who participated in the Minnesota State Farm Business Management (FBM) Education program. This report highlights three different farm cohorts from the 2021 MN FBM State Database. The first cohort is the beginning farmers, defined as those with less than 10 years of farming experience. There were 688 farms in this cohort. The second cohort is the mid-career farmers, with 11-30 years of farming experience, totaling 671 farms. The final cohort is the long-term farmers with greater than 30 years of farming experience, including 904 farms. These charts illustrate that the Beginning Farmer cohort represents a relatively similar type of farm compared to the mid-career and long-term farms when comparing sources of income. As expected, the beginning farmer cohort is younger in age and therefore has significantly fewer years of experience.



5-year Average (2017-2021)	Beginning Farmer Less than 10 years farming	Mid-career Farmer 11 to 30 years farming	Long Term Farmer Over 30 years farming
Income Statement			
Gross cash farm income	\$369,140	\$827,142	\$1,066,512
Total cash farm expense	\$317,261	\$701,795	\$900,203
Average net farm income *	\$78,846	\$131,261	\$155,073
Median net farm income *	\$40,077	\$66,507	\$67,631
Liquidity			
Working Capital	\$119,796	\$226,375	\$360,513
Working Capital as % GFI **	29.1%	25.8%	32.4%
Profitability (cost)			
Rate of return on assets	7.6%	5.7%	4.7%
Rate of return on equity	13.0%	7.4%	5.0%
Solvency (yearend at market)			
Total assets	\$1,189,958	\$2,912,466	\$4,349,596
Total liabilities	\$650,616	\$1,379,175	\$1,653,931
Net worth	\$539,341	\$1,533,291	\$2,695,664
Total Debt to Asset Ratio	55%	47%	38%
Replacement Capacity			
Term Debt Coverage Ratio ***	2.64	1.91	1.86
Efficiency			
Operating Expense Ratio	72.2%	74.4%	75.8%
Net Farm Income Ratio	18.5%	14.6%	13.4%
Non-farm			
Net Non-farm Income	\$45,486	\$41,126	\$34,030
Tot Fam Liv & NF Invest.	\$66,676	\$85,654	\$98,164
Crop Acres			
Total Acres Owned	56	180	319
Total Crop Acres	402	834	990
Machinery Value / Crop Acre	\$431	\$662	\$828
Average Land Rent / acre	\$169	\$167	\$184
Percent Crop Acres Owned	14%	22%	32%

Comparing the 5-year Averages

The 5-year average data provides a look at the financial status of each cohort. This provides a view of the ability of the farm business to withstand economic downturns.

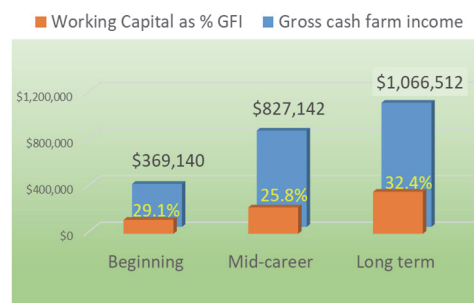
This table shows that beginning farmers have significantly lower levels of average and median net farm income*, suggesting more challenges in economic downturns on the farm.

Working capital as a % of gross farm income** is a financial metric that shows the amount of support available to a farm when faced with increased financial stress.

When that number is below 30%, there is concern about having enough liquidity to meet all financial obligations in cases of depressed commodity prices or decreased farm production.

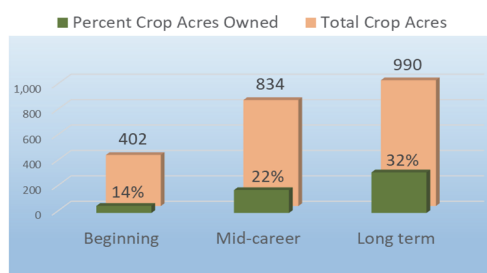
This chart shows the reduced level of working capital and working capital as a % of gross farm income for beginning farmers.

On average, the beginning farmers have a higher term debt coverage ratio***. This ratio illustrates the farms' ability to make term debt payments. Noting their reduced net farm income, this suggests that the level of term debt is less for beginning farmers and more non-farm income may be required to support debt payments.

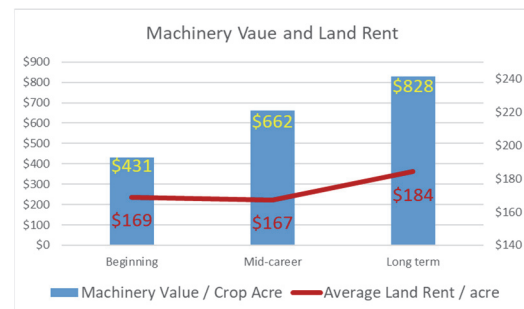


On average, beginning farmers are more reliant on non-farm income to cover family living and non-farm investments compared to both the mid-career and long-term farms. While the higher non-farm income can help beginning farmers in establishing their farms, it can result in less time available for managing and operating their farms. This requires the beginning farmers to be acute time managers as well.

In reviewing the crop related information, beginning farmers have much smaller operations, in terms of total crop acres, compared to mid-career and long-term farms. Owning fewer acres reduces the equity they have to acquire more land at the same rate as their counterparts. Beginning farmers have lower machinery value per acre, suggesting there is less machinery owned and more machinery borrowed or custom hired. The average land rent per acre for beginning farmers is higher than the



mid-career farmers, which may or may not be influenced by geographic differences. Beginning farms must compete on virtually equal grounds with more established farmers while they build both their land base and equity over time. This suggests that special programs like tax credits and scholarships are essential in supporting beginning farmers in mastering farm business management skills.

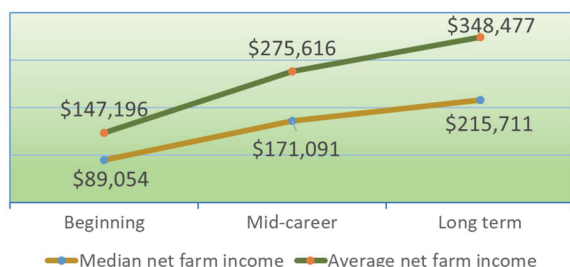


2021 Financials At-A-Glance

2021 was a strong year for production agriculture, where the average net farm income reached \$267,379 and the median net farm income was \$158,294. The table highlights a few selected financial factors for 2021.

Beginning farmers have a smaller gross cash farm income, as well as, a smaller average and median net farm income compared to the other two cohorts. This demonstrates that time is required to establish a farm

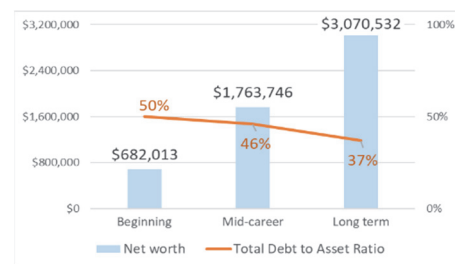
2021	Beginning Farmer	Mid-career Farmer	Long Term Farmer
Gross cash farm income	\$457,536	\$1,028,421	\$1,277,853
Average net farm income	\$147,196	\$275,616	\$348,477
Median net farm income	\$89,054	\$171,091	\$215,711
Rate of return on assets	13.3%	10.8%	10.0%
Rate of return on equity	25.0%	17.6%	14.2%
Net worth	\$682,013	\$1,763,746	\$3,070,532
Total Debt to Asset Ratio	50%	46%	37%



business that will generate the net farm income necessary to fully support the farmer and his/her family.

The beginning farmers show a higher rate of return on assets and rate of return on equity compared to the other cohorts, as shown on the table above. Even though beginning farmers have a lower net farm income, their total assets are much lower than the other groups, resulting in an improved rate of return.

Historically, when farmers are challenged financially, they have utilized the equity in the business to refinance or support their financial position. This continues to be more difficult for beginning farmers, because they carry a significantly higher total debt to asset ratio, as shown in the chart. The chart also shows the significant difference in the amount of net worth (equity) for the Beginning Farmer and the more experienced farmers.



Operating expense ratio is important because it shows the percentage of farm income needed to pay the costs of operating the farm, such as: seed, feed, fertilizer, chemicals, land rent, etc. A lower operating expense ratio, indicates more income is available to cover additional farm expenses like interest and depreciation. In 2021, beginning farmers show very similar operating expense ratios compared to the other two cohorts. Beginning farmers are often assisted by family members or others though machinery and building usage/sharing. This support can be seen in the difference in operating expense ratio and net farm income ratio between the cohorts. Combined with the

depreciation and interest ratios, the four ratios total 100% of business activity. The higher net farm income ratio for beginning farmers suggests reduced cost of machinery ownership and lower interest in total.

A look back to 2018

While 2021 was a strong financial year in production agriculture, 2018 was not. The comparison between 2021 data and 2018 data for beginning farmers shows much stronger numbers in 2021 due to the increased commodity prices and yields for a large majority of the state. 2018 numbers show the financial challenges, and resulting personal stress, for beginning farmers when commodity prices or production is reduced. Two example would be Total Debt to Asset Ratio, which shows an 8% difference; and Operating Expense Ratio, which shows a 13.4% difference.

When looking at the land available for crop production, there is virtually no difference for the beginning farmer from 2018 to 2021. Both acres of land owned and rented remained equal or at near equal levels, and the percent owned remained virtually the same. The cost of rented land increased due to the need to compete with more experienced farmers for available land at market rates.

Beginning Farmer Data	2021	2018	Difference
Gross cash farm income	\$457,536	\$333,057	137%
Average net farm income	\$147,196	\$40,317	365%
Median net farm income	\$89,054	\$25,222	353%
Working Capital as % GFI	38.6%	21.2%	182%
Total Debt to Asset Ratio	50%	58%	116%
Operating Expense Ratio	65.0%	78.4%	121%
Total Acres Owned	58	58	100%
Total Crop Acres	400	403	99%
Average Land Rent / acre	\$181	\$164	111%
Percent Crop Acres Owned	15%	14%	101%

Historically, high commodity prices have also resulted in historically high expenses as well. History suggests that a correction in the commodity price is inevitable in the future. When that correction has happened in the past, beginning farmers have been the most affected due to their equity positions and lower overall working capital available; hindering their ability to adjust to falling commodity prices.

The table above illustrates the beginning farmer's vulnerability to market volatility. As indicated earlier in this report, farm business management skills are critical to a beginning farmer's long term success.

For more information, visit the AgCentric website at: <https://www.agcentric.org/farm-business-management/annual-fbm-reports/>

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