FINANCIAL STATUS OF

BEGINNING FARMERS

APRIL 2023





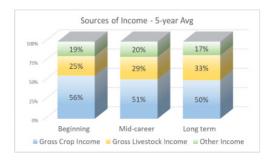


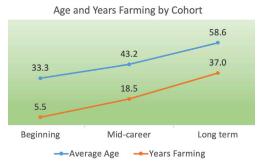


FINANCIAL STATUS OF BEGINNING FARMERS IN MINNESOTA

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 2022 MN FBM State Database. The first cohort is the beginning farmers, defined as those with less than 10 years of farming experience. There were 618 farms in this cohort. The second cohort is the mid-career farmers, with 11-30 years of farming experience, totaling 664 farms. The final cohort is the long-term farmers with greater than 30 years of farming experience, including 849 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.

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.

5-year Average (2018-2022)	Beginning	Mid-career	Long Term
5 year Average (2010 2022)	Farmer	Farmer	Farmer
	Less than 10	11 to 30	Over 30
	years farming	years farming	years farming
Income Statement			
Gross cash farm income	\$404,615	\$910,667	\$1,161,910
Total cash farm expense	\$344,456	\$764,146	\$966,880
Average net farm income *	\$99,602	\$183,528	\$220,410
Median net farm income *	\$52,181	\$95,328	\$109,404
Liquidity			
Working Capital	\$151,740	\$303,610	\$461,594
Working Capital as % GFI **	33.0%	30.8%	37.3%
Working Capital as % Op Ex	47.2%	42.9%	51.1%
Profitability (cost)			
Rate of return on assets	9.0%	6.6%	4.9%
Rate of return on equity	16.9%	10.0%	6.2%
Solvency (yearend at market)			
Total assets	\$1,136,684	\$2,524,942	\$3,422,641
Total liabilities	\$608,726	\$1,176,705	\$1,252,890
Net worth	\$527,958	\$1,348,237	\$2,169,751
Total Debt to Asset Ratio	54%	47%	38%
Replacement Capacity			
Debt Coverage Ratio	2.72	2.17	2.24
Term Debt Coverage Ratio ***	2.88	2.29	2.37
Efficiency			
Operating Expense Ratio	70.0%	71.8%	72.9%
Net Farm Income Ratio	21.4%	18.2%	17.1%
Non-farm			
Net Non-farm Income	\$46,537	\$43,557	\$35,064
Tot Fam Liv & NF Invest.	\$69,386	\$90,388	\$107,150
Crop Acres			
Total Acres Owned	56	179	311
Total Crop Acres	406	859	996
Machinery Value / Crop Acre	\$451	\$670	\$850
Average Land Rent / acre	\$175	\$171	\$191
Percent Crop Acres Owned	14%	21%	31%

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.



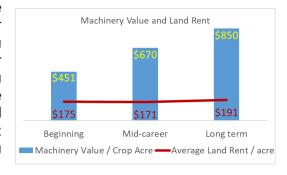
On average, beginning farmers are more reliant on non-farm income to cover family living and non-farm investments compared to both the mid-career and long-term farms. While the higher non-farm income can help beginning farmers in establishing their farms, it can result in less time available for managing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



2022 FINANCIALS AT-A-GLANCE

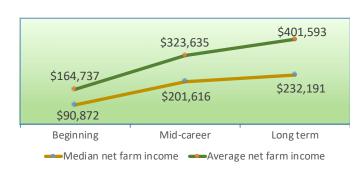
2022 was a strong year for production agriculture, where the average net farm income reached \$308,613 and the median net farm income was \$173,845. The table highlights a few selected financial factors for 2022.

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 business that will generate

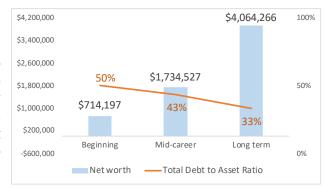
2022	Beginning	Mid-career	Long Term
	<u>Farmer</u>	<u>Farmer</u>	<u>Farmer</u>
Gross cash farm income	\$527,433	\$1,148,351	\$1,432,318
Average net farm income	\$164,737	\$323,635	\$401,593
Median net farm income	\$90,872	\$201,616	\$232,191
Rate of return on assets	11.4%	10.1%	7.7%
Rate of return on equity	21.5%	17.0%	11.0%
Net worth	\$714,197	\$1,734,527	\$4,064,266
Total Debt to Asset Ratio	50%	43%	33%

the net farm income necessary to fully support the farmer and his/her family.

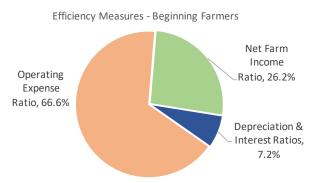
The beginning farmers show a higher rate of return on assets and rate of return on equity compared to the other cohorts, as shown on the table to the left. Even though beginning farmers have a lower net farm income, their total assets are much lower than the other groups, resulting in an improved rate 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 through 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 2022 was a strong financial year in production agriculture, 2018 was not. The comparison between 2022 data and 2018 data for beginning farmers shows much stronger numbers in 2022 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 examples would be Total Debt to Asset Ratio, which shows an 8% difference; and Operating Expense Ratio, which shows a 12.0% difference.

When looking at the land available for crop production, there is very small difference for the beginning farmer from 2018 to 2022. Both acres of land owned and rented remained near equal levels, and the percent owned increased slightly. The cost of rented land increased due to the need to compete with more experienced farmers for available land at market rates.

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.

Beginning Farmer Data	2022	2018	Difference
Gross cash farm income	\$527,433	\$333,057	158%
Average net farm income	\$164,737	\$40,317	409%
Median net farm income	\$90,872	\$25,222	360%
Working Capital as % GFI	38.6%	21.2%	182%
Total Debt to Asset Ratio	50%	58%	116%
Operating Expense Ratio	66.6%	78.4%	118%
Total Acres Owned	66	58	114%
Total Crop Acres	415	403	103%
Average Land Rent / acre	\$199	\$164	121%
Percent Crop Acres Owned	16%	14%	111%

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.