Average accrued net farm income in Iowa declined by 89% from its peak at $243,072 in 2012 to $27,927 in 2015, before recovering to $58,832 in 2018 (Plastina 2019a). Because of this erosion in farm profitability, a deterioration of the overall financial health of the farm sector ensued, in terms of both lower average liquidity levels and higher average farm debt levels, particularly in short- and medium-term liabilities (Figure 1).

The average current ratio (calculated as current assets divided by current liabilities) for Iowa farms peaked in 2012 at 7.08, and it has since declined to 2.77 in 2017, its lowest level since 2001, before increasing slightly to 3.14 in 2018. Similarly, the average working capital (calculated as the difference between current assets and current liabilities) per dollar of gross revenue declined from 0.78 in 2013 to 0.55 in 2017, and increased to 0.56 in 2018. However, understanding the actual distribution of liquidity across
farms is more relevant to track the financial health of the farm sector than measuring the liquidity of the “average” farm. This is particularly true for a low-commodity-price environment with sticky costs that puts extra strain on cash-flow budgets.

Data
Following Plastina (2019b), and based on the availability of complete and detailed financial statements for the years 2014-2018, 214 mid-sized commercial farms were selected from the Iowa Farm Business Association’s (IFBA) database. The sample farms are believed to be representative of mid-scale commercial farms largely managed by experienced farmers.

Liquidity Ratings
Based on their current ratio in December of each year, each of the 214 sample farms were assigned a liquidity rating in each year: vulnerable, normal, or strong. A current ratio above 1.7 indicates a strong liquidity position; a ratio below 1.3 indicates a vulnerable liquidity position, and a ratio between 1.3 and 1.7 is normal and indicates that liquidity should be kept under close watch (Becker et al. 2014). To avoid outliers, only farms with non-negative current ratio values below 50 were selected.

The distribution of counts of farms across the three categories is used as an indicator of the overall financial liquidity situation among mid-scale commercial farms in Iowa at calendar year-end. The count of farms that switched categories across years is used as an indicator of the change in the liquidity situation for Iowa farms.

Results
While farms with strong liquidity ratings accounted for 45.8% of the sample in December 2014, they only represented 33.6% of the sample in December 2018 (Figure 2). Conversely, while farms with vulnerable liquidity ratings represented 31.3% of the sample in 2014, they accounted for 43.9% of the sample in 2018.

As shown in Figure 3, most of the increase in the number of farms with vulnerable liquidity ratings occurred in 2015, followed by another increase in 2016 (8.9% and 4.2%, respectively). However, the decline in the number of farms with strong liquidity ratings took place mostly in 2015 and 2017, with a slight improvement in 2016.

The average loss in working capital per acre across all farms in the sample amounted to $139 in 2015, $76 in 2016, and $22 in 2017, accumulating a $237 loss between December 2014 and December 2017. In 2018, average working capital per acre increased by $47, the equivalent of 20% of the accumulated loss in 2014-2017. More importantly, between December 2014 and December 2017, 5% of the farms lost at
least $100 of working capital per acre per year, 6% lost between $50 and $100, and 6% lost between $25 and $50. However, only 1 in 12 farms that lost at least $25 of working capital per acre per year in 2015-2017 was able to offset those losses in 2018.

Figure 4 shows the annual evolution of average working capital per acre by group of farms. However, since the composition of each group of farms varies from year to year, a more informative comparison is provided in Figure 5, which shows the annual evolution of working capital per acre for all sample farms grouped according to their vulnerability ratings in December 2018. The average working capital per acre increased for the three groups of farms in 2018. However, while the vulnerable farms only recovered 7% of the working capital lost in 2014-2017 ($20 vs. $307), the group of farms with normal liquidity recovered 18% of its loss ($44 vs. $245), and the group of farms with strong liquidity recovered 63% of its working capital loss ($88 vs. $140).

Discussion
This article describes the slight improvement in financial liquidity across Iowa farms in 2018, and confronts it to the strong deterioration observed over 2014-2017. Although the sample size is small, the results of this study are intended to serve as an initial guide to understanding the extent of financial stress across agricultural operations in Iowa, and to highlight the critical relevance of developing and implementing realistic cash-flow budgets in production agriculture.

References


\(^1\) Liquidity indicates the degree to which debt obligations coming due over the following year can be paid from cash or assets that soon will be turned into cash, and is typically measured by the current ratio and the working capital.

\(^2\) The IFBA is an independent association, managed and controlled by its farmer-members.

\(^3\) While dairy farms or other farms that have continuous sales throughout the year can safely operate with lower CRs, operations that concentrate sales during several periods each year (such as cash grain farms) need to strive for higher CRs, especially near the beginning of the crop year.
Farm Families have unique risks and experiences in the farming way of life. Farm families often choose the lifestyle due to the pleasures of being their own boss and raising their family on a farm. But, farming is a high risk occupation both in physical safety and financial security.

The natural environment with weather, market forces and hard work can end in either profit or loss. Loss is a reality to farming in the event a cow dies, a crop is flooded or the cash flow and finances even causes one to lose the farm.

Grief is experienced as normal and can even be healthy as one reacts to the loss of something that is loved and cherished. Dealing with grief is a learned skill to help one understand grief, not to overcome it, but process through it to hopefully return to normal functioning over time.

Loss is a life event where someone or something that is loved suddenly or slowly ceases to be a part of our lives. Dealing with an acute loss (barn fire, death in family) or a chronic loss (loss of profits over time), or an ambiguous loss (not sure of the what, how and whys of a loss) all need the process of grief to deal with the loss. Even though loss is typically bad, the “grief process” can be good in helping one deal with the loss and return to meaningful life.

Isolation of many rural farm families is not a friend to the “Good Grief” process as extended family and community support is often the best medicine.

Research shows people are often best helped by a friend or family member, even more so than a trained counselor— though they may be very important in the process, too.

Deacon Larry’s “Good Grief” recipe:
Grief is unique—everyone needs their own recipe
Grief takes time—let it work in due time
Grief has loss—keep the memories alive
Grief can cause anger—be aware in response
Grief is messy—let the mind and body cry
Grief is “extreme” stress—practice safety
Grief tastes bitter—recall the happy times
Grief can be lonely— others feel helpless
Grief stops one’s world—the world moves on
Grief needs empathy—but accept the sympathy
Grief needs comfort—make healthy choices
Grief needs exercise— “move” your spirit into it
Grief needs hope—tend to feelings of despair
Grief needs a smile, at least once in a while!

Let “Good Grief” Build Stamina to Survive
What We Didn’t Think Possible— for “Good Grief’s” Sake!

Deacon Larry Tranel, Bereavement Minister

Many sharp, entangled emotions go through the grieving person. When it is the loss of a dairy herd or farm, knowing this tradition is coming to an end, can cause farmers to feel shame and failure. An accident or loss of assets can cause farmers to feel guilt. Males are engrained to protect and provide for their families and feel at fault even though external market forces, which farmers have no control over, are making it difficult for many others to survive in the same farm climate. Know one is not alone!

Following is a graph of the grief process I’ve found very beneficial. The upper left begins with normal functioning before a stress event, loss or grief began. The magnitude and abruptness of the loss determines the amount of shock, denial, anger and anxiety that may occur and the associated feelings of avoidance, confusion, fear, blame, guilt and frustration that may surface in response.

At the bottom, even with “Good Grief”, feelings of being overwhelmed, depressed, immobilized with
lack of energy, is an area of biggest concern as loss of hope may cause unhealthy decisions. Hopefully, through the struggle and reaching out in dialogue to others, exploring options and life without, a new acceptance can be attained, with a return to a meaningful life—life just different than before.

With grief, people often wonder--are YOU over it YET? With “Good Grief”, the goal is NOT to get over it, but to savor the memories of what was lost, and process through grief to return to a meaningful life in one's own time.

Resources for more information
ISU Extension and Outreach publications available at: https://store.extension.iastate.edu

- Changing Farm Financial Conditions
- Encouraging a Friend to Seek Professional Help
- How to Help “When You Don't Know What to Say”
- All About Stress—Taking Charge Series
  https://store.extension.iastate.edu/Product/5165
- All About Stress
- Managing Stress in Young Families
- Managing Stress in Midlife Families
- Managing Stress in Later Life Families
- Helping Children Manage Stress
- Using What You Have to Get What You Want

Farm Stress Resource Links for more information:
- Stress on the Farm: Strategies that Help, www.extension.iastate.edu/dairyteam/files/page/files/handout_-_stress_on_the_farm_strategies_that_help.pdf
- Managing Farm Stress, www.canr.msu.edu/managing_farm_stress/, Michigan State University Extension

Mental Health--Impact for Farm Families Collection (from National Ag Safety Database)
- Agricultural safety And Health Are Improving, But Not For Psychological Injuries And Fatalities
- Depression: Common For Farm People
- Tips On Recognizing And Dealing With Depression

Behavioral Health Problems Of Farm People Differ From The General Population
- Anxiety And Depression: Common, But Manageable For Farmers
- Handling Relationship Problems Enhances The Well-Being Of Farm People
- Farmers’ Common Behavioral Health Issues Often Are Occupation-Related
- Suicide: Permanent End to a Temporary Problem

4-State Dairy Farm Stress Webinar Series
1. Recognizing and Managing Stress in Dairy Farmers Farm Stress & Decision-Making During Challenging Times (webinar handout: John Shutkske-WI), https://connect.extension.iastate.edu/pwnwoqrzb0ez/
   Your Work as an Ag Professional: Helping Tame Farm Stress (webinar handout: John Shutkske-WI), www.extension.iastate.edu/dairyteam/files/page/files/farmstress-a-ash-103-top10listpdf.pdf
   How to Cultivate a Productive Mindset-Michigan State University Extension (webinar handout), http://msue.anr.msu.edu/resources/how_to_cultivate_a_productive_mindset
3. **Dairy Outlook** (webinar July, 2018 as outlooks change), [http://msue.anr.msu.edu/resources/how_to_cultivate_a_productive_mindset](http://msue.anr.msu.edu/resources/how_to_cultivate_a_productive_mindset)

4. **Know your Cost of Production**, [https://connect.extension.iastate.edu/p73nubog1jh7/](https://connect.extension.iastate.edu/p73nubog1jh7/)

5. **Making Production Decisions During Challenging Times**, [https://connect.extension.iastate.edu/pxgg213zwlq/](https://connect.extension.iastate.edu/pxgg213zwlq/)

Webinars are also available on [ISU Extension Dairy Team website](http://www.extension.iastate.edu/dairyteam/farm-stress-management) or at [Four-State Dairy Nutrition & Management Conference](http://fourstatedairy.org/webinars.html)

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**Dairy Team**

ISU Dairy Field Specialists—Here to Help!
NE Iowa, Jenn Bentley, 563-382-2949, jbentley@iastate.edu
NE/SE Iowa, Larry Tranel, 563-583-6496, tranel@iastate.edu
NW Iowa, Fred Hall, 712-737-4230, fredhall@iastate.edu

Along with State Dairy Specialists:
Dr. Jan Shearer, jks@iastate.edu
Dr. Hugo A. Ramírez Ramírez, hramirez@iastate.edu

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**Internet Updates**

The following Decision Tool has been updated on [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm).

**2014-2023 Payment Data by County for ARC-CO and PLC** – A1-33 (Decision Tool)

**Current Profitability**

The following tools have been updated on [www.extension.iastate.edu/agdm/info/outlook.html](http://www.extension.iastate.edu/agdm/info/outlook.html).

- **Corn Profitability** – A1-85
- **Soybean Profitability** – A1-86
- **Iowa Cash Corn and Soybean Prices** – A2-11
- **Season Average Price Calculator** – A2-15
- **Ethanol Profitability** – D1-10
- **Biodiesel Profitability** – D1-15

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