



***The World's Largest Open Access Agricultural & Applied Economics Digital Library***

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## **Farmer's Financial Well-being: A Conceptual Framework and Case Study**

**Zekuan Dong, Michigan State University, [dongzku@msu.edu](mailto:dongzku@msu.edu)**

**Melissa G.S. McKendree, Michigan State University, [mckend14@msu.edu](mailto:mckend14@msu.edu)**

*Selected Poster prepared for presentation at the 2023 Agricultural & Applied Economics Association  
Annual Meeting, Washington DC: July 23- 25, 2023*

*Copyright 2023 by Zekuan Dong and Melissa G.S. McKendree. All rights reserved. Readers may make  
verbatim copies of this document for non-commercial purposes by any means, provided that this  
copyright notice appears on all such copies.*

# Farmer's Financial Well-being: A Conceptual Framework and Case Study

Zekuan Dong and Melissa G.S. McKendree  
Michigan State University

Contact Information: [dongzku@msu.edu](mailto:dongzku@msu.edu); [mckend14@msu.edu](mailto:mckend14@msu.edu)



Department of Agricultural,  
Food, and Resource Economics  
MICHIGAN STATE UNIVERSITY

## Introduction:

Economists are rethinking how to measure well-being. Historically, only financial measures were considered, however, now subjective well-being measures, which take the individuals' feelings and perceptions into account are being incorporated. Indeed, financial well-being (FWB) should now capture both objective (e.g., incomes, assets, and consumptions) and subjective (e.g., perceptions of current financial situation, confidence in the future, and sense of achievement) measures of people (Joo, 2008; Brüggen et al., 2017). Although the theories and empirical studies about consumers' FWB are well-developed, we find that the studies about farm households' FWB are scarce.

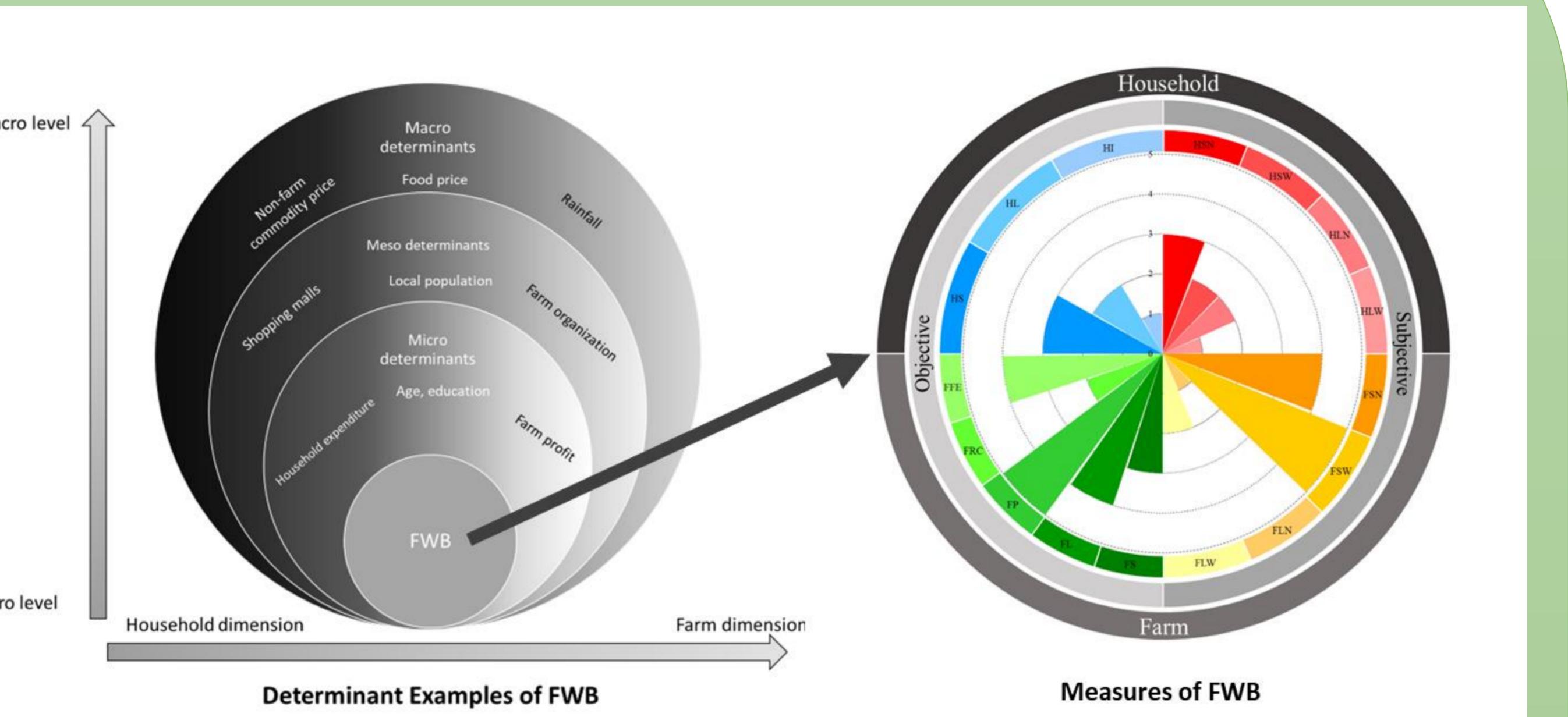
- We review the theoretical foundation of general financial well-being. The theoretical foundation of FWB, especially for consumers' FWB, is well-developed. They provide basic analysis tools for us.
- We carefully review the literature about farmers' financial well-being and identify three gaps in previous literature. First, the subjective aspects are usually ignored, and farmers' feelings are missing. While subjective aspects of FWB are well discussed in areas like sociology, agricultural economics lags in studying farmers' feelings. Second, farmers' roles as both producers and consumers are not well considered. Many works studying farmers' FWB use the same or similar frameworks constructed for consumers' FWB. However, farmers are also producers facing different problems and more complex decision-making environments. Third, there is not a compelling and widely used framework or research agenda to help understand farmers' FWB.
- We further discuss the characteristics of farmers' financial well-being and the importance of building a unique framework for farmers' FWB. Based on our discussion, we propose a framework for the determinants and measures of farmers' FWB.
- We propose a survey that can be applied to empirical studies to systematically measure farmers' FWB. Detailed questions and quantization methods are provided.
- We examine our framework and survey through a case study on US beef farmers.

This work provides a study framework and research agenda applicable to research about farmers' FWB. It deep our understanding of the relationship between farmers' objective financial health and subjective mental health and provides implications for farm stress and the prevalence of farmer suicides.



Source: Photos from the Internet

## Conceptual Framework for Farm Households' Financial Well-Being



The figure presents a conceptual framework to study farmers' FWB.

The first figure shows the relationships of the determinants at macro, meso, and micro levels, and illustrates how they ultimately impact the core of the framework: farmers' FWB.

The second figure illustrates the 16 dimensions to measure farmers' FWB.

In the **subjective-household category**, we have four dimensions: 1) household short-term needs (HSN), 2) household short-term wants (HSW), 3) household long-term needs (HLN), and 4) household long-term wants (HLW).

In the **subjective-farm category**, there are the four following dimensions: 1) farm short-term needs (FSN), 2) farm short-term wants (FSW), 3) farm long-term needs (FLN), and 4) farm long-term wants (FLW).

In the **objective-farm category**, we have five dimensions: 1) farm solvency (FS), 2) farm liquidity (FL), 3) farm profitability (FP), 4) farm repayment capacity (FRC), and 5) farm financial efficiency (FFE).

In the **objective-household category**, we have the following three dimensions: 1) household solvency (HS), 2) household liquidity (HL), 3) household investment (HI).

## Survey for Measuring Farm Households' Financial Well-Being

### Household Short-Term Needs

My household could handle a major unexpected expense.  
My household could find the money to pay for a financial emergency that costs about \$2,000.  
My household is just getting by financially.  
I worry about being able to meet normal monthly living expenses.  
Giving a gift for a wedding, birthday or other occasion would put a strain on my household's finances for the month.  
My household is behind with its finances.  
My household's finances control my life.  
My household has money left over at the end of the month.

### Household Long-Term Needs

My household is securing its financial future.  
My household has saved (or will be able to save) enough money to last to the end of my life.  
I am confident that my household can repay its long-term debt on time (e.g., housing mortgage).  
I am concerned the money my household has saved or will save won't last.

### Household Short-Term Wants

My household's financial situation is better than others in my community.  
My household's current financial situation is better than it was 5 years ago.  
My household can enjoy life because of the way we manage our money.  
Because of our money situation, I feel like we will never have the things we want in life.  
My household wants to go out for entertainment (eat, watch a movie, etc.) but doesn't go because we can't afford to.

### Household Long-Term Wants

My household will achieve its long-term financial goals.  
Over the next 5 years, I think my household's financial situation will be better than others in my community.

### Farm Short-Term Needs

The farm's financial condition is strong enough to survive the next year.  
I am comfortable with the farm's projected cash flow for the next year.  
The farm could find the money to pay for a financial emergency that costs about 15% of its annual cash sales.  
The farm is profitable.

### Farm Long-Term Needs

I am confident the farm can adapt to changes in the agricultural industry (e.g., policies, technology, etc.) over the next 10 years.  
I am confident the farm can handle revenue risks (e.g., yield, price, quality) over the next 10 years.  
I am likely to stop farming or significantly change the farming operation in the next five years because of a tough financial situation.  
I am confident that the farm can repay its long-term debt on time (e.g., real estate).  
To the best of my knowledge, the ratio of the farm's debt to assets (farm debt divided by farm assets) is \_\_\_\_.

### Farm Short-Term Wants

The farm is generating enough profit to meet short-term goals (3 years or less).  
My time and ability that I invest in the farm is earning a greater return than if I invested it into another job.  
My financial investment in the farm is earning a greater return than if I invested it elsewhere.  
The farm delays purchasing equipment because of financial strain.  
The farm's net worth (owner's equity) is \_\_\_\_ it was 5 years ago.

### Farm Long-Term Wants

The farm's profit is sufficient to meet long-term goals (e.g., environmental sustainability, financial sustainability, farm succession, etc.).  
Over the next 5 years, the farm's financial situation will be better than other farms in my community.  
If there was land for sale that I wanted to buy, the farm has resources or access to credit that are sufficient to make the purchase.  
The farm will be able to financially support my successor or heirs (even if I do not have a plan for this yet).  
I still want to be a farmer in 5 years.