

## Factors Influencing Farms Transitioning Between Financial Vulnerability Categories

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Ag Lenders 2016

- What likelihood do farms
  - transition between vulnerability classifications?
  - remain in their current vulnerability class?
- What causes farms to transition or persist?

## Solvency Classification (ERS)

- **Favorable:** NFI/ac > 0, debt-to-asset ≤ 40%
- **Marginal Income:** NFI/ac < 0, debt-to-asset ≤ 40%
- **Marginal Solvency:** NFI/ac > 0, debt-to-asset > 40%
- **Vulnerable:** NFI/ac < 0, debt-to-asset > 40%

NFI/ac income per acre after operating expenses were removed  
divided by total operated acres

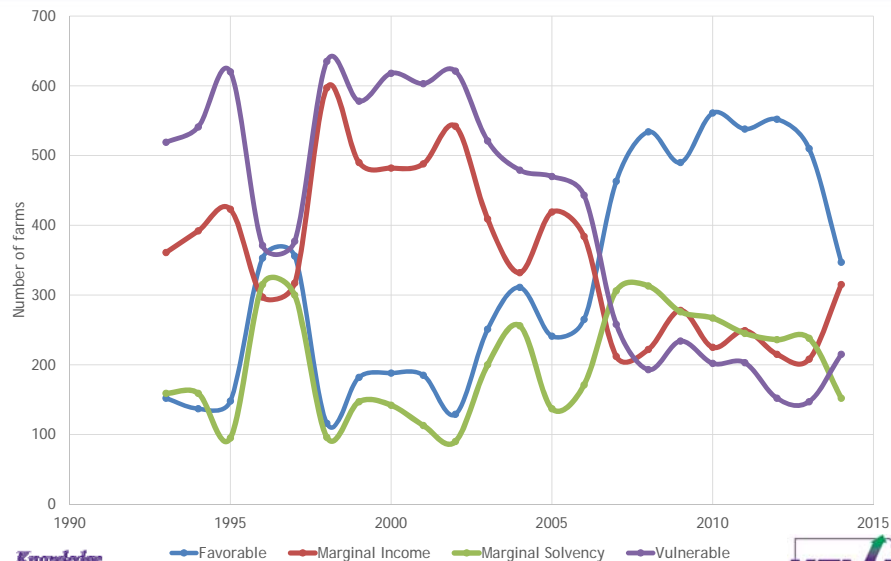
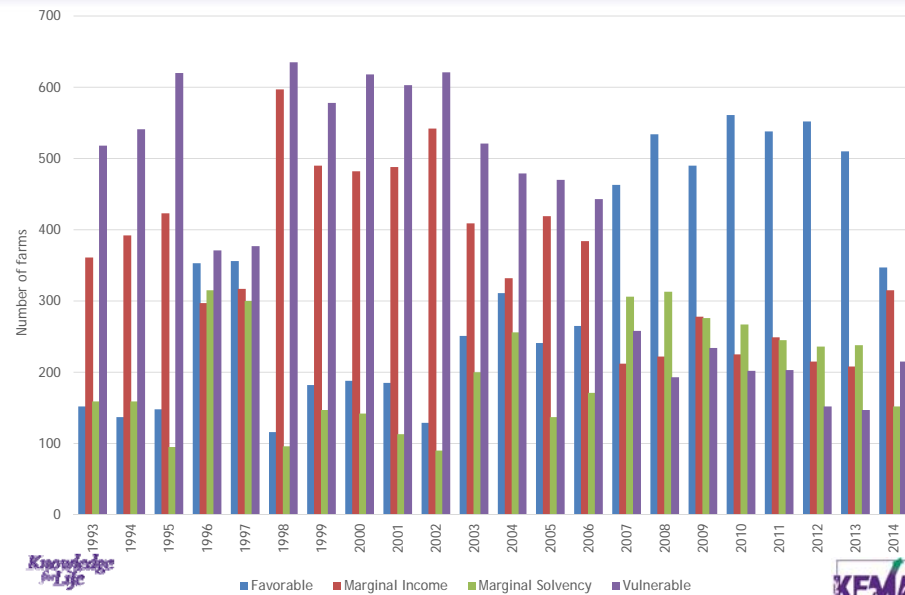
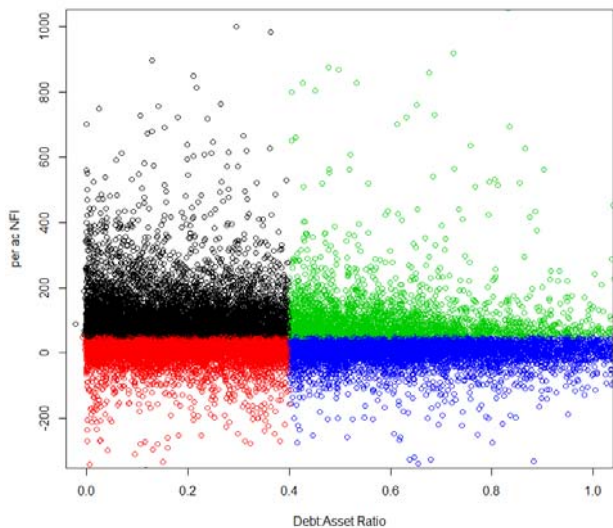
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## Solvency Classification (KFMA)

- **Favorable:** NFI/ac > 50, debt-to-asset ≤ 40%
- **Marginal Income:** NFI/ac < 50, debt-to-asset ≤ 40%
- **Marginal Solvency:** NFI/ac > 50, debt-to-asset > 40%
- **Vulnerable:** NFI/ac < 50, debt-to-asset > 40%

NFI/ac income per acre after operating expenses were removed  
divided by total operated acres

Borrowed from: Kueth; USDA ERS

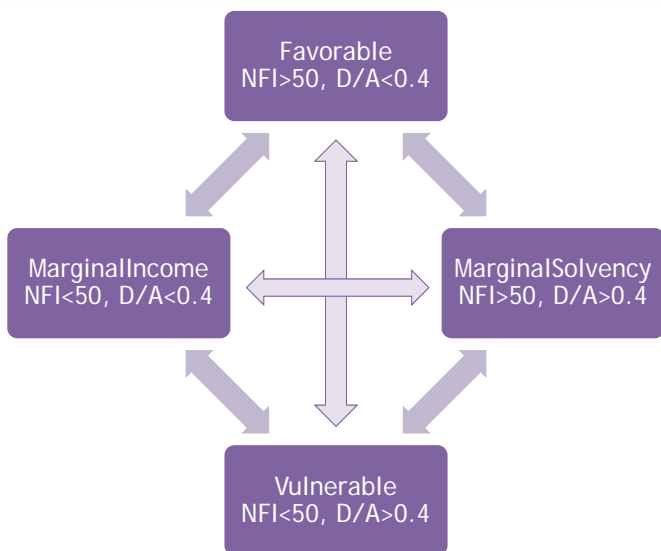


- 52% of all Kansas Farms from 1993-2014 were below the 0.4 D/A ratio
- Average of 7 years of KFMA participation
- Farm type determined by labor % designated to production; grain farms may be diversified

Year	Operator Age	Primary Crop	Owned Acres
1993	51	37% Wheat-NI	504
2005	55	32% Wheat-NI	626
2014	57	30% Wheat-NI	714

Year	Operator Age	Acres Owned	Primary Crop
2005	55.3	625	32% Wheat-NI
2006	55.6	660	34% Wheat-NI
2007	55.5	635	32% Wheat-NI
2008	55.4	707	34% Wheat-NI
2009	55.8	710	29% Wheat-NI
2010	54.5	783	29% Soybeans-NI
2011	55.8	743	28% Wheat-NI
2012	56.4	685	31% Wheat-NI
2013	56.8	750	31% Wheat-NI
2014	57.5	714	30 % Wheat-NI

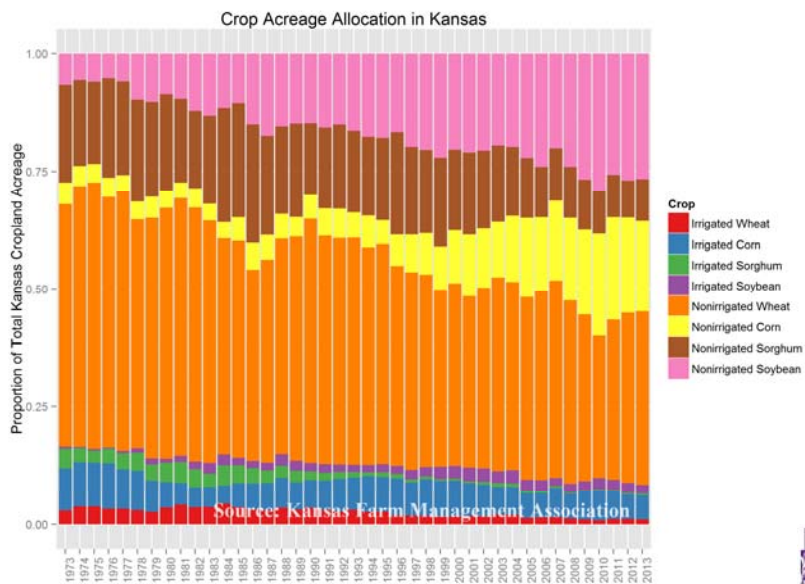
- Looking for persistence or movement
- Likelihood of persisting in current financial category or transitioning to another



		To			
		Favorable	Marginal Income	Marginal Solvency	Vulnerable
From	Favorable	<b>0.58</b>	0.31	0.06	0.05
	Marginal Income	0.28	<b>0.6</b>	0.03	0.09
	Marginal Solvency	0.12	0.06	<b>0.45</b>	0.37
	Vulnerable	0.05	0.08	0.2	<b>0.68</b>

Moderate persistence  
\*highest value in each row along diagonal

Farms in Marginal Solvency have high chance of moving into Vulnerable position



- Financial persistence was observed over 23 year time span (1993 to 2014) for Kansas KFMA Farms
  - management can impact stability
- Farms in Marginal Solvency category had high probability of becoming Vulnerable



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