

Managing Farm and Farm Household Financial Risk

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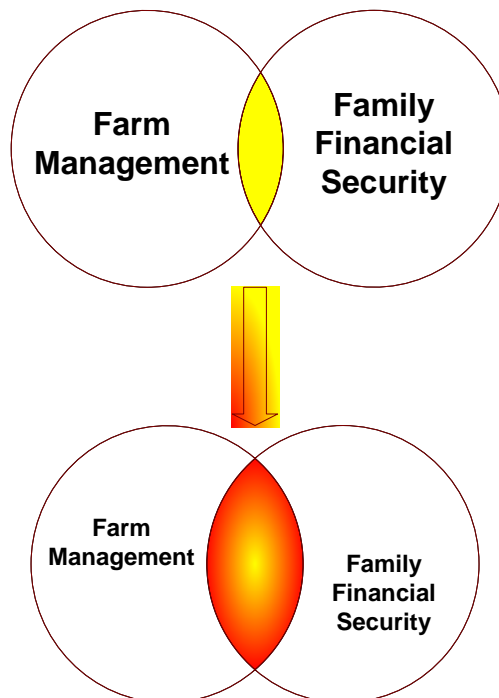
Agriculture is ...

- Food
- Feed
- Fiber
- Flowers
- Fuel
- Finances



Purpose

- Highlight links between farm and farm household financial risk
- Show how research informs practice
- Spotlight Annie's Project, an Extension program



The Context

- Economic uncertainty
- Off-farm income
- More financial risks
- Less financial literacy
- Later life issues



Farm Family Consumption and Investment Patterns: Relationships to Farm and Nonfarm Income

Paul N. Ellinger, Professor
University of Illinois



Outline



- Purpose/goal
- Farm data description
- Relationships among income, consumption and investment
- Outreach tools for farms and ranches

Goals



- Measure relationships among farm income, family income, consumption and investments
- Introduce decision tools used by farmers and lenders to measure and manage financial risks of farm and household

Data



- Illinois Farm Business Farm Management Association
- Approximately 6000+ farms, 60 professional field staff
- Records, tax and financial management

Farm Income



	2007	2006	2005	2004	2003	Average
Operators' Total Net Farm Income	\$209,012	\$103,303	\$62,940	\$97,514	\$70,640	\$108,682
Grain Farms....	\$220,797	\$109,569	\$60,273	\$94,046	\$72,637	\$111,464
Hog Farms.....	96,892	108,461	122,184	209,968	73,182	\$122,137
Dairy Farms....	166,276	57,073	103,370	108,395	60,600	\$99,143
Beef Farms....	97,537	12,243	50,733	66,784	72,456	\$59,951

1998-2002 Operators' Total Net Farm Income = \$32,038

Farm and Family Income



Farm and Family Sources and Uses of Dollars - Average per Farm in Illinois,
2003-2007.

Item	2007	2006	2005	2004	2003	Average
Age of operator	53	53	52	51	51	52
Number in family	3.0	3.1	3.1	3.2	3.3	3.2
Age of oldest dependent child	17	17	17	17	16	17
Total tillable operator acres	729	725	694	699	668	703
Net farm income	\$ 193,675	\$ 94,756	\$ 55,030	\$ 93,704	\$ 66,290	\$ 100,691
Net non-farm income	31,668	29,614	27,810	27,280	25,919	28,458
Less: Income and SS taxes	<u>10,964</u>	<u>10,251</u>	<u>10,351</u>	<u>8,208</u>	<u>7,571</u>	<u>9,469</u>
Net farm and family income after taxes	<u>\$ 214,379</u>	<u>\$ 114,119</u>	<u>\$ 72,488</u>	<u>\$ 112,776</u>	<u>\$ 84,638</u>	<u>\$ 119,680</u>

1998-2002 Net Farm & Family Income After Taxes = \$42,124

Family Living & Investments



Farm and Family Sources and Uses of Dollars - Average per Farm in Illinois,
2003-2007.

Item	2007	2006	2005	2004	2003	Average
Net farm and family income after taxes	<u>\$ 214,379</u>	<u>\$ 114,119</u>	<u>\$ 72,488</u>	<u>\$ 112,776</u>	<u>\$ 84,638</u>	<u>\$ 119,680</u>
FAMILY LIVING EXPENSE:						
Contributions	\$ 2,303	\$ 1,888	\$ 2,058	\$ 1,816	\$ 1,583	\$ 1,930
Medical	8,071	7,665	7,433	7,320	6,581	7,414
Life Insurance	3,039	2,978	2,900	2,753	2,681	2,870
Expendables	<u>46,881</u>	<u>42,463</u>	<u>40,352</u>	<u>40,700</u>	<u>37,314</u>	<u>41,542</u>
Total Non-Capital.	\$ 60,294	\$ 54,994	\$ 52,742	\$ 52,589	\$ 48,160	\$ 53,756
Capital.	<u>6,118</u>	<u>4,692</u>	<u>5,542</u>	<u>5,960</u>	<u>4,749</u>	<u>5,412</u>
Total Living Expenses	<u>\$ 66,412</u>	<u>\$ 59,686</u>	<u>\$ 58,285</u>	<u>\$ 58,550</u>	<u>\$ 52,910</u>	<u>\$ 59,168</u>
Farm Capital Purchases	\$ 59,969	\$ 40,029	\$ 42,495	\$ 46,156	\$ 35,291	\$ 44,788
Net Savings & Investments Off Farm	\$ 28,665	\$ 13,768	\$ 11,908	\$ 13,488	\$ 14,033	\$ 16,372

Family Living and Investments 1998-2003



Net farm and family income after taxes	\$ 42,124
Total Living Expenses	\$ 46,898
Farm Capital Purchases	\$ 28,888
Net Savings & Investments Off Farm	\$ 9,085

Family Expenditures



Number in Family		
1 - 2	3 - 5	>5
\$ 58,771	\$ 72,438	\$ 82,675

Age of Oldest Dependent Child		
Under 10	10 - 16	Over 16
\$ 65,443	\$ 72,399	\$ 74,705

Non-Capital Living Expense For Family of Three to Five	
High 1/3	Low 1/3
\$ 103,668	\$ 45,517
Age of Operator	
Less than 45	45 and Older
\$ 54,322	\$ 59,269

Families of 1 or 2

Simple Linear Regression Model 2006 and 2007 Data



- Significant variables in explaining family living
 - + net nonfarm income
 - + net farm income
 - + debt to asset ratio
 - + number in household
 - + wealth
 - + age > 45

Marginal Effects: 2006



\$10,000 nonfarm income:	\$1,552 family living
\$10,000 net farm income	\$ 432 family living
10% increase in DA	\$2,620 family living
Increase in household	\$3,947 family living
Age > 45	\$3,464 family living
Increase \$100,000 wealth	\$ 412 family living

Marginal Effects: 2007



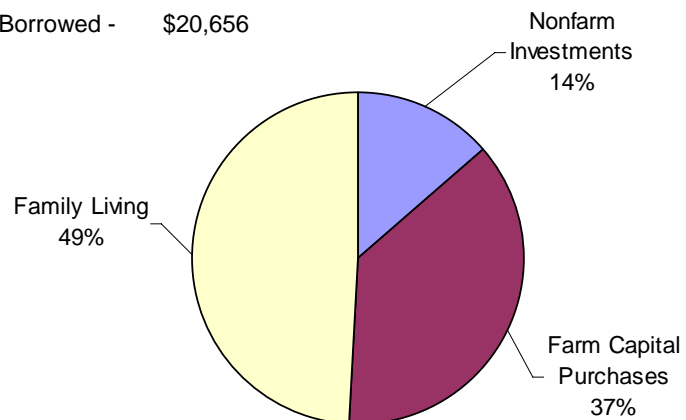
\$10,000 nonfarm income:	\$1,315 family living
\$10,000 net farm income	\$ 533 family living
10% increase in DA	\$2,832 family living
Increase in household	\$4,708 family living
Age > 45	\$ 902 family living
Increase \$100,000 wealth	\$ 167 family living

Uses of Net Cash Income + Net Funds Borrowed:2007



Net Cash Income - \$99,669

Net Borrowed - \$20,656



Nonfarm Investments - 2007



Total Farm and Nonfarm Assets	\$ 1,926,542	% of Assets
		Unweighted ave.
Cash	\$ 24,276	1.6%
Savings & Marketable Sec.	\$ 68,600	3.4%
Retirement & Nonmarketable Sec.	\$ 95,307	5.4%
Personal Residence, Items, & Furnishings	\$ 122,437	8.3%
		18.6%

Change in Value 2007



Cash	\$ 4,652
Savings & Marketable Sec.	\$ 5,517
Retirement & Nonmarketable Sec.	\$ 4,630
Personal Residence, Items, & Furnishings	\$ 7,754

Nonfarm investments by leverage



% of Assets

	Savings and Marketable Securities	Retirement and Nonmarketable Securities
Debt to Asset		
0-20	5.7%	7.0%
21-40	2.2%	4.8%
41-70	1.2%	3.4%
71 -100	0.4%	1.8%
> 100	0.1%	0.0%
Average	3.4%	5.4%
Financial Risks?		

Nonfarm investments by age

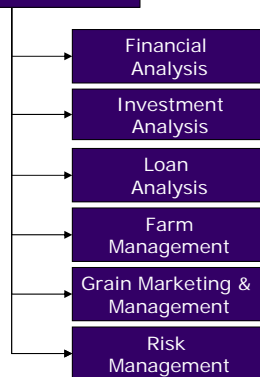


	Savings and Marketable Securities	Retirement and Nonmarketable Securities
Age		
< 30	2.2%	2.1%
30 - 39	2.4%	4.4%
40 - 49	2.4%	5.0%
50 - 59	2.9%	6.4%
> 60	5.0%	5.0%
Average	3.4%	5.4%

FAST Tools - Overview



Computerized Decision Aids



FAST Tools Distribution



- Tools – Excel-spreadsheet based
 - Enhances portability
- Facilitate use, access, distribution of tools and resources through CD and internet distribution
 - Quarterly subscription (\$60/\$45 per year)
 - farmdoc download
 - via workshops
- Approximately, 40,000 CDs produced and over 41,000 downloads
- Full time professional coordinator
- Increased demand for education and training

Farm and Family Financial Planning



- 1 and 5 year financial planning modules
- Historical financial statement generators
farm and nonfarm
- Financial ratio calculators
- Savings and retirement needs calculator
 - Farm and nonfarm
- Investment decision aids

Biological, Psychosocial, and Behavioral Correlates of Risk Tolerance and Risk Taking



John E. Grable, Professor
School of Family Studies and Human
Services, Kansas State University

What Is Financial Risk Tolerance?



- The maximum amount of uncertainty that someone is willing to accept when making a financial decision
- or
- The willingness to engage in behaviors in which the outcomes remain uncertain with the possibility of an identifiable negative outcome

What Risk Tolerance is Not



- While closely related, risk tolerance is not the same as:
 - Risk Perception
 - Risk Preference
 - Risk Capacity

Example: I may perceive investing as risky; I may also have a willingness to take investment risk, but I may prefer not to take any risks because I don't have the capacity to lose money.

Theoretical Dimension of Risk



- The literature suggests that risk tolerance is a multidimensional concept that includes a person's comfort with:
 - General risk taking
 - Gambles and speculation
 - Losses and gains
 - Investments
 - Investment terminology

How Do You Feel?



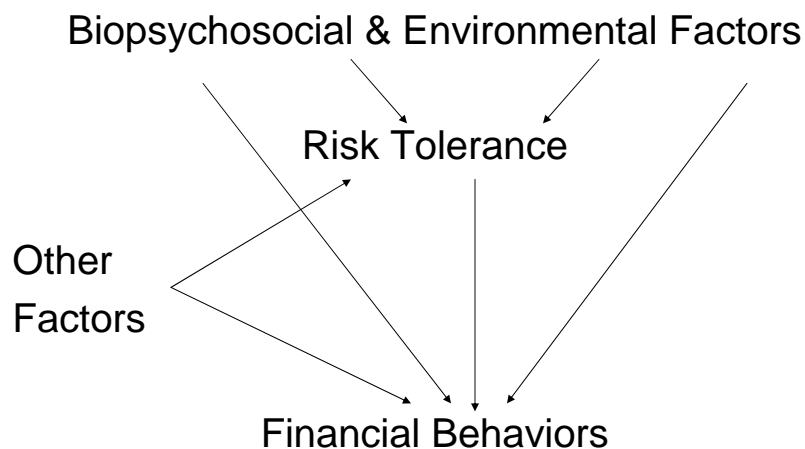
- You can get a good feeling for your own risk tolerance (i.e., willingness to take risk) by gauging your reaction to the following terms:
 - Gambling
 - Safety
 - Uncertainty
 - Loss
 - Gain
 - Chance

How are risk attitudes and behaviors linked?



- How Financial Risk Tolerance Is Used
 - Self-Assessment
 - Counseling and Planning Assessment
 - Financial Product Suitability
 - Underlying Factor of Consumer Decisions
 - Household Production Decisions

The Relationships



Predicting Risk Tolerance



Variable	Type	Characteristic	Relationship
Age*	Biopsychosocial	Younger	Positive
Gender	Biopsychosocial	Male	Positive
Race/Ethnic Background	Biopsychosocial	Non-Hispanic White	Positive
Financial Satisfaction	Biopsychosocial	Higher	Positive
Household Income	Environmental	Higher	Positive
Net Worth	Environmental	Higher	Positive
Education	Environmental	Bachelor's Degree or Higher	Positive
Homeownership	Environmental	Own Home	Positive
Marital Status*	Environmental	Married	Positive
Employment Status	Environmental	Employed Full-Time	Positive
Financial Knowledge	Environmental	Higher	Positive

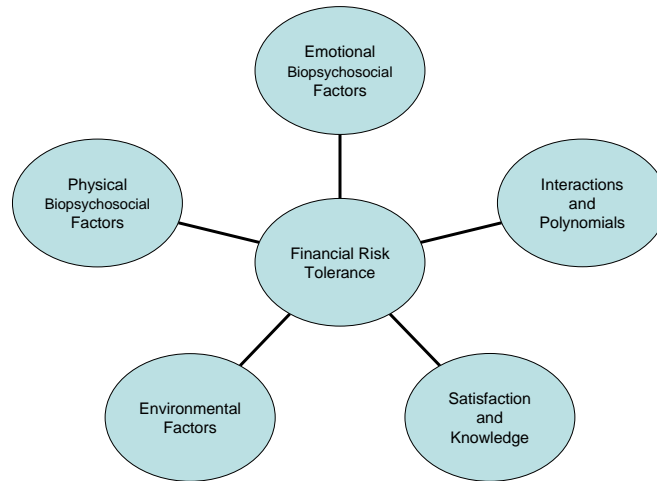
* Relationship is inconclusive

Other Interesting Variables



- Self-Esteem
- Sensation Seeking
- Locus of Control
- Type-A Personality
- Financial Satisfaction
- Mood

Framework of Risk Tolerance



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Underlying Factor of Consumer Decisions



- Saving versus Consumption Decision
- Debt versus Saving Decision
 - Mortgage choice
 - Credit card choice
 - Minimum payments
 - Late fees
 - Other penalty fees and charges
 - Auto loan choice
 - Home equity loan choice
 - Reverse mortgage loan choice
- Consumer Choices
 - Type of car purchased
- Household (Farm) Production Choices

Assess Yourself



- Want to improve your personal finances? Start by taking a risk quiz to get an idea of your risk tolerance--one of the fundamental issues to consider when planning your investment strategy, either alone or in consultation with a professional.

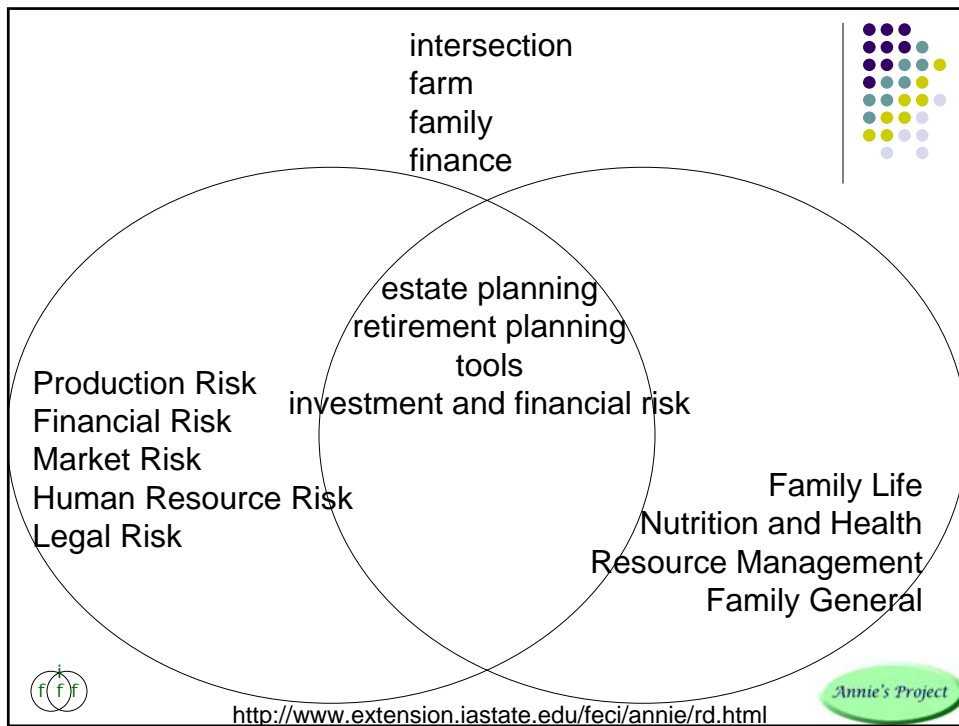
<http://www.rce.rutgers.edu/money/riskquiz/>

- Note: This quiz was developed by two university personal finance professors, Dr. Ruth Lytton at Virginia Tech and Dr. John Grable at Kansas State University. By taking this quiz you will be contributing to a study on measuring financial risk tolerance. Your results will be recorded anonymously. We are not collecting any identifying information.

How Separate Are Farm and Family Finances? Lessons from Annie's Project



Tim Eggers
Field Agricultural Economist
Iowa State University



Vision



To bring financial security and well being to women in rural communities where food, fiber and fuel production are synonymous with family.



Mission



To empower farm women to be better business partners through networks and by managing and organizing critical information.

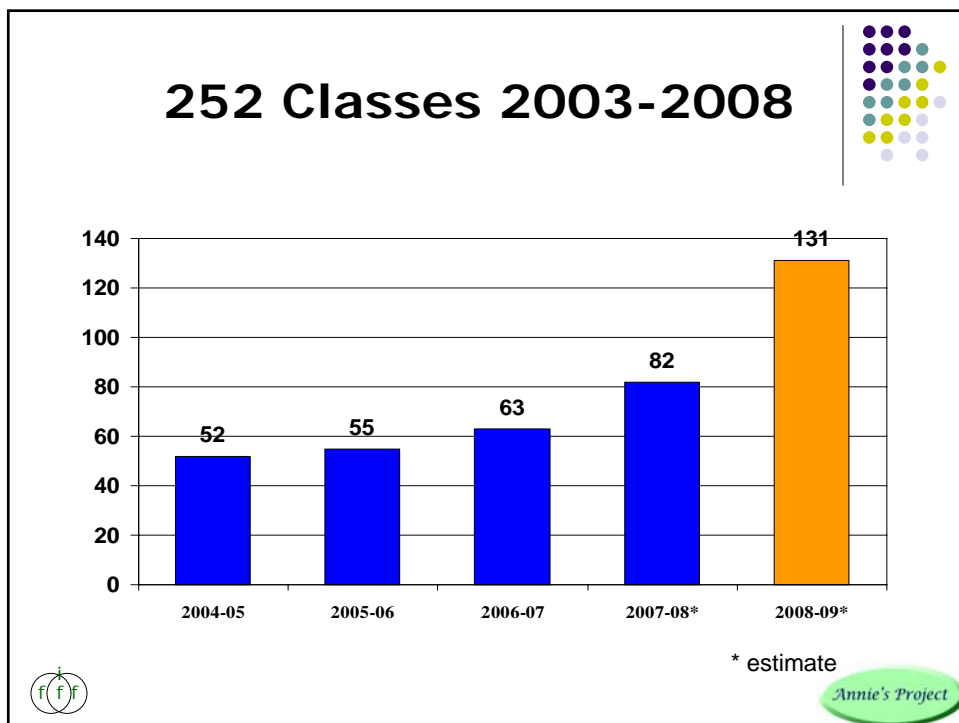
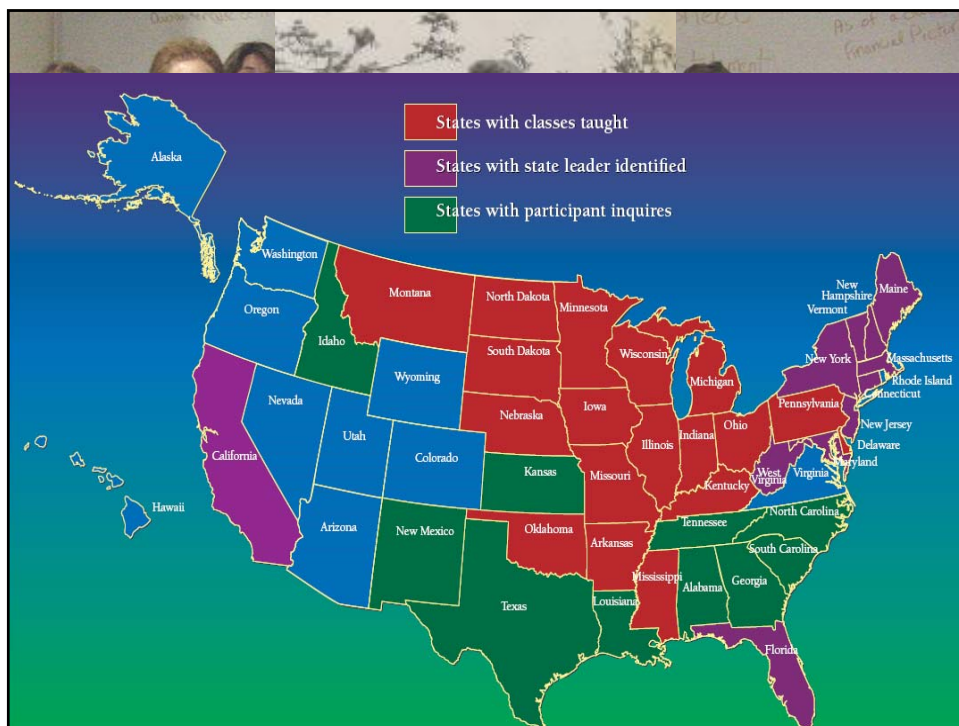


Learning Environment

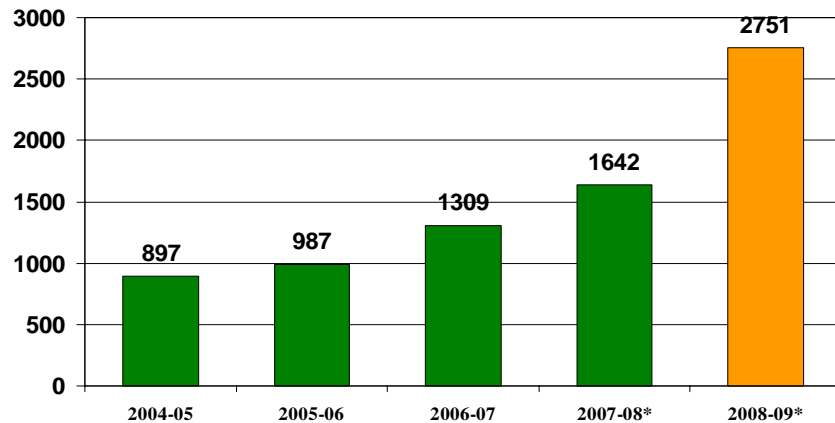


- Safe Harbor
- Connection
- Discovery
- Guided intelligence





4,835 Participants 2003-2008



* estimate



Annie's Project

Presenters

Qualifications

Agricultural Professional

Excellent service and/or communication skills

Recruitment Process

Face-to-Face visit

Share Annie's Project mission, scope, and **method**

Share Registration Progress

Offer material Support

Follow-up call and letter

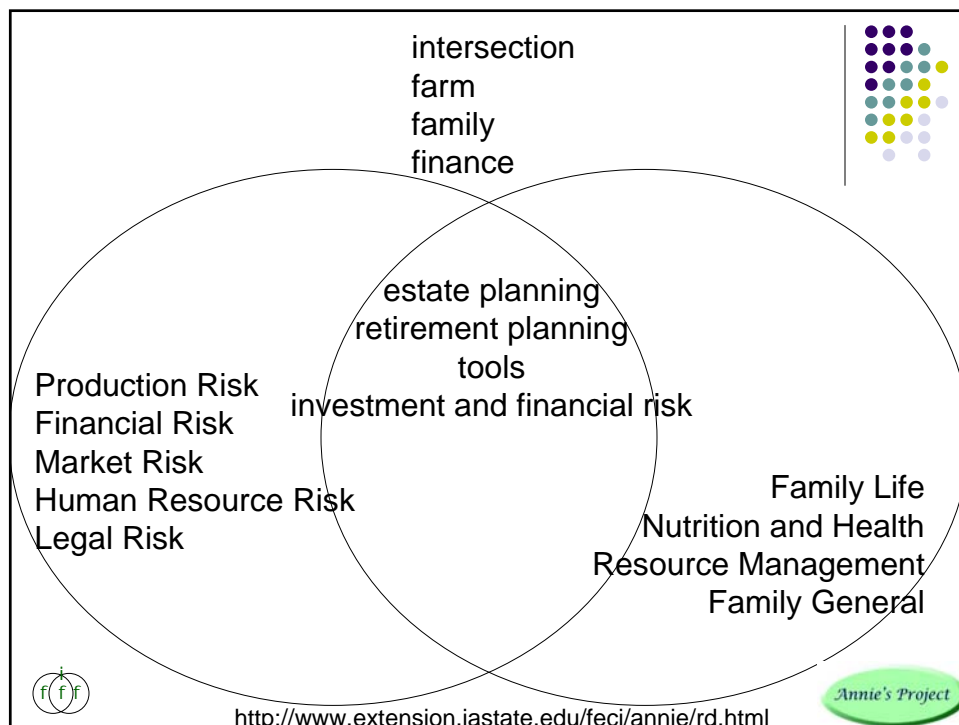
Thank you letter after presentation



Annie's Project

1					Planning Committee Matrix
2					Malvern Annie's Project
3					Date: February 28-April 10
4					Location: Mills County Extension Office
5					
6	Date	Location	Topic	Time	Presenter
7	Thursday			3 hours per session	
8			Session One		
9	28-Feb	Classroom	Risk Assessment (pre-test)	10 minutes	Tim Eggers, ISUE
10			Colors	90 minutes	Mary Ottmar, ISUE
11			Preparation for next session	10 minutes	Tim Eggers, ISUE
12					
13			Session Two		
14	6-Mar	Computer Lab	Ag Decision Maker	50 minutes	Tim Eggers, ISUE
15			SoilView	50 minutes	Tim Eggers, ISUE
16			Crop Insurance Issues for 2008	50 minutes	Kelly Crouch, FB
17					
18			Session Three		
19	13-Mar	Classroom	Life, Disability, and Long-Term care insurance	50 minutes	Brenda Loewe, FB
20			Grain Marketing	50 minutes	Amy Applegate, Bartlett Grain
21			Financial documents (balance sheet, income statement, cash flow)	50 minutes	Lori Rew, ECI
22					
23			Session Four		
24	27-Mar	Classroom	Soil Fertility Management	50 minutes	Cathy Assman, FS Coop
25			Women & Money - family living/retirement	50 minutes	Mary Beth Kaufman, ISUE
26			Estate Planning	50 minutes	Beverly Jones, Attorney
27					
28			Session Five		
29	3-Apr	Classroom	Ag Tax Issues	50 minutes	Karen Straight
30			Interpretation of Financial Statements	50 minutes	Amy Thygesen, FCSA
31			Business Plans	50 minutes	Tim Eggers, ISUE
32					
33			Session Six		
34	10-Apr	Computer Lab	Farm Programs	50 minutes	Barb Gerzevske, FSA Fremont County
35			Farmland Rental	45 minutes	Deb Schuller, Smith Land Service
36			Intersection of Farm and Family Finance	50 minutes	Tim Eggers, ISUE
37					





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Summary and Questions



More Information



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