

**THE 2010 OHIO STATE UNIVERSITY
USED FARM MACHINERY & EQUIPMENT SURVEY:**

**U.S. Farmers' Attitudes and Opinions about Sales via
Auction, Dealer, Classified Ad and the Internet**

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Executive Summary

Little is known about how farmers buy and sell used farm machinery and equipment (**FME**), particularly for topics such as internet transactions of used FME or farmer opinions of key players in used FME markets such as dealers or auctioneers. Understanding these issues is critical for several reasons. First, used FME is crucial asset on many farms throughout the U.S.. Second, the quality of used FME is highly variable and difficult for buyers to assess in many sales formats. Third, given increasing rural internet availability and decreasing numbers of auctions and dealers, more information about the experiences of those using internet-based venues is important to determine the potential desirability of internet markets for used FME.

To fill this informational void, we asked more than 5,200 U.S. farmers about used FME markets during early 2010. More than 2,500 (48%) responded and gave us information about recent used FME transactions, ratings of different ways to buy and sell used FME and attitudes and opinions regarding local FME dealers and used FME auction venues.

We found that U.S. farmers were active in used FME markets with 69% purchasing and 40% selling (not including trade-ins) used FME within the past 5 years. Most buyers of used FME bought from dealerships (55%), while other popular purchasing venues included auctions (16%) and classified ads (10%). Less than 5% bought from auctions or ads over the internet. Most buyers felt they paid fair market value (83%) and felt certain about the quality of the item before they took possession (94%). Internet buyers were less likely to say they got a fair deal but were similarly certain of the quality of items.

Most sellers of used FME relied upon personal contacts or simple for-sale signs to sell their equipment (43%), with auctions (22%) and classified ads (22%) being the next most popular mode of sale. Less than 5% of these non-traded used FME items were sold via internet. Most sellers (87%) also felt they received fair market value for their items, including those who sold via internet. Furthermore, when asked about the degree of satisfaction they had with all components of the selling process, those who had sold via internet classified ads reported the greatest satisfaction.

All respondents then rated five different ways of buying or selling used FME: dealership, auction, internet auction, classified ad and internet classified ad. Prospective buyers had the most favorable impressions of dealers and the least favorable impressions of internet auctions, while prospective sellers had the most favorable impressions of classified ads and the least favorable impressions of internet auctions. Despite these unfavorable impressions of internet venues, 55% of prospective buyers and 71% of sellers might consider using internet classified ads in the future.

We also asked about the number of local FME dealerships that farmers had done business with during the past 5 years and the quality of the relationship the farmer had with the dealership that was most integral to current farming operations. More than 80% had done business with at least

two dealerships while 26% had done business with four or more dealers. However, there were regional differences, with farmers in the South and West listing fewer dealer relationships than farmers in the East or Midwest. Most farmers were pleased with the repair and parts service provided by the local dealer (88%) and with how they were treated during sales and trade-ins (77%). However, nearly one in four farmers felt that the business relationship they have with their closest dealership could be in jeopardy if they ‘shopped around’ to other dealers to get a better price.

Finally we asked farmers why they attend auctions and how much trust they would place in the quality of items sold in various auction formats. U.S. farmers were most attracted to auctions for reasons of gauging local market conditions and networking with other farmers and community members rather than as a means of getting better prices or a fairer deal. Farmers also said they were more likely to trust the quality of items being sold at local auctions more than those sold at regional auctions or internet auctions.

These results paint a first picture of U.S. farmers’ engagement in used FME markets and suggest that the internet currently plays a minor role in actual transactions within this key asset market. While few buyers and sellers of used FME currently use the internet, those who reported selling via internet feel they received fair market value and feel a high level of satisfaction with the selling process and many buyers and sellers report they would consider internet venues for future used FME transaction. However, in order for the internet to grow into a viable venue in this market, buyers will have to be convinced that they are receiving fair market value and more potential sellers must become aware of the low commissions charged by internet auction sites.

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1. Introduction

The value of farm machinery and equipment (**FME**) held by U.S. farmers in 2007 was more than \$195 billion (U.S. Department of Agriculture, 2009a). After land and buildings, which were valued at \$1.7 trillion in 2007, a farm's machinery and equipment inventory is its most valuable asset. For tractors alone, more than 1.8 million farms reported holding 4.4 million machines in 2007. Furthermore, only 12 percent of the tractors reported to the U.S. Census of Agriculture in 2007 were less than four years old, implying that used FME represent a vital portion of U.S. farm assets and that the efficiency of these markets is important to the overall welfare of U.S. agriculture. Indeed, more than \$18.5 billion of FME were transacted at auctions alone in 2008 (National Auctioneers Association 2009).

While used FME is a crucial asset to U.S. farm operations, relatively little is known about how farmers buy and sell used machinery and equipment, view internet auction and sales platforms for used FME, or feel about key players in used FME markets such as auctioneers and dealers. Understanding these issues is critical for several reasons. First, as stated above, used FME assets are crucial to the successful operation of many farms throughout the U.S.. Second, used FME markets face challenges due to the variable quality of used machines and the difficulty buyers face when assessing quality, particularly in complex machines sold in venues that make direct inspection difficult. Third, given increasing internet availability in rural areas and the decreasing number of auctions and dealers in many areas, more information about the experiences of those using internet-based venues for used FME transactions is important to help buyers and sellers determine the potential desirability of internet sales venues.

To better understand the U.S. used FME market, we have reached out to a large sample of U.S. farmers. In this report we provide a detailed report of how this study was conducted and the results. The next section discusses the procedures and methods used to conduct the research and a discussion of how results were analyzed to reflect a representative view of the U.S. farm population. Section 3 discusses results concerning farmers' most recent purchase or sale of used FME, both with regard to the venue of the transaction and farmers' satisfaction with the transaction. Section 4 reviews farmers' ratings of different possible ways to buy and sell used FME. Section 5 summarizes the number and quality of working relationships that farmers have with local FME dealers while Section 6 reviews attitudes and opinions farmers hold about auctions and different auction formats. Section 7 concludes.

2. Procedures and Methods

Data was collected via a mail survey administered during the first quarter of 2010. Two versions were administered: one that focused on buying used FME and one focused on selling. Copies of each version are posted online at <http://aede.osu.edu/people/roe.30/FME.htm>. The U.S. postal service delivered 6,000 surveys (3,000 of each version) to farmers across the continental 48

states. The first mailing in early January, 2010 included an introductory letter, a \$2 cash incentive, survey and a pre-paid return envelope. About 10 days later all 6,000 in the sample received a reminder postcard. About two weeks later, those who had not returned a survey received a replacement packet containing a letter, a survey and a pre-paid return envelope. Finally, about 3 weeks later, those who had not responded received a final letter urging participation.

The mailing addresses and names for our sample of respondents was provided by a commercial list vendor who relied upon various sources including farm payment lists to generate the sample. The sample was balanced equally across four regions of the continental 48 states with equal numbers drawn from East, Midwest, South and West regions (see Table 1 for sample description and the states that comprise each region). Furthermore, the sample was restricted to farmers generating more than \$10,000 in annual gross farm income and stratified across gross farm income categories with oversampling of farmers in higher sales ranges to ensure enough total respondents from this smaller group of farmers. Finally, the observations are clustered at the county level, meaning that more than one observation was drawn from most counties included in the sample. Specifically, sample addresses are drawn from 1,384 distinct counties and 2,927 distinct zip codes across the 48 states.

Of the 6,000 surveys mailed, 671 were deemed undeliverable (either marked undeliverable by the U.S. postal service or marked by the respondents as inappropriate due to either change in occupation by the respondent or that the respondent did not participate in farming activities, but was rather merely the landlord). A total of 2,559 responses were gathered that had sufficient data to aid in analysis, which yields an effective response rate of 48%.

A key question is whether those who responded to the survey are a representative cross-section of U.S. farmers. Given that the sampling approach oversampled large farms and forced equal numbers from different regions of the country, we first created weights for each observation based upon a respondent's region and gross farm income category. These weights are listed as the bottom number in each cell of Table 1. For example, the top-left cell of Table 1 lists a sample weight of 0.68 for respondents from the smallest category of farms (gross sales between \$10,000 and \$49,999) and from the East region. A sample weight less than one means that, proportional to the number of small, Eastern farms in the U.S., the number of these farms that responded to the survey is too large to make it representative. So, for every 100 farms that responded from this category, any statistical average or other statistic will act as if this category only contributed 68 farms.

Once the sample weights listed in Table 1 are employed, we checked to see if the weighted sample was representative in other ways that are important for our study. Of particular interest is the internet usage in the used FME market. We checked to see if internet access for our sample matched that of U.S. farmers in these sales categories (\$10,000 and above). Of the farmers in the weighted sample, 71.7% report internet access, which is statistically

indistinguishable from the internet access average of 71.2% reported by U.S.D.A. (U.S. Department of Agriculture 2009b).

In several other key categories such as race and one educational category, the weighted sample mean is statistically indistinguishable from national averages taken from Ag Census or U.S.D.A. sources. In other areas our averages are statistically distinct from national averages. Specifically, in our sample, the age profile is slightly older, more male and features more individuals with a college degree. It also appears that our sample features more farms with both crops and livestock enterprises than occurs nationally. None of these deviations was severe enough in our opinion to warrant further weighting of the data, however, particularly given the differences could be due to differences in question wording between our survey and those implemented by the Census of Agriculture or U.S.D.A. instruments.

The sample could also be biased due to non-response along characteristics for which national averages are not yet known, such as reliance on internet for FME transactions, opinions regarding various FME sales outlets, the quality of relationships farmers have with local dealers or farmers' general trust or risk tolerance. To investigate such a possibility, in Table 3 we compare the responses to several questions between those farmers who responded quickly to our survey (within 4 weeks) to those who responded only after several reminders. The concept is that, had we not sent reminders, these late responders would have been non-respondents, which gives us some idea of whether those who we never responded will systematically differ from those who did respond. For the six variables explored in Table 3, the responses of early and late respondents are not distinct at traditional thresholds of statistical significance. This analysis suggests little non-response bias among those variables for which there exist no previous nationally representative data.

3. Recent Transactions: Venue Choice and Satisfaction

U.S. farmers are active in used FME markets. More than two-thirds (69%) have purchased used FME within the past 5 years while 40% have sold (not including trade-ins) used FME during that same timeframe. The fact that farmers are less active in selling used FME stems from two factors. First, farmers reported that nearly half of used FME (48%) is traded in as part of subsequent purchases of FME, and we did not classify this as selling for the purposes of this study. Second, 23% of used FME is kept by farmers for spare parts. U.S. farmers only sold 29% of used FME when it was no longer of use.

When asked about their most recent used FME transaction, used FME buyers rely most on dealerships, used FME sellers rely most on sales venues other than auctions or dealership, and very few buyers or sellers use internet markets. Of used FME buyers, 55% of farmers said they bought their most recent used FME item from a dealership. Significantly fewer said this item came from an auction (16%), a classified ad (10%), from an internet classified advertisement

(3%) or from an internet auction (<1%). When it comes to selling used FME (non-trade-in machines), there was a much smaller reliance on dealerships with only 9% being sold to a dealer. Sales to auctions (22%) and via classified ads (22%) were more likely, while sales via internet auctions (<1%) and internet classified (3%) were small. The most frequent mode of sale for used FME was the category 'sold another way' (43%), which suggests that personal connections and simple 'for sale' signs dominate sales of used FME nationally.

The vast majority of buyers (83%) and sellers (87%) of used FME felt as though they had paid or received fair market value for the item. Of those not believing the item traded at fair market value, buyers were more likely to feel they over paid than under paid (11% vs. 7%) while sellers were more likely to feel they were under paid rather than overpaid (9% vs. 4%). We then tested to see if perceived fairness of the deal differed by whether the internet (auction or classified ad) was the venue for the transaction. For sellers there was no statistical difference in perceived fairness of the deal. However, buyers were more likely to think they paid too much for the item if they bought via the internet than if they bought if from any non-internet venue.

A concern among buyers is that they have less information about the quality of the item than the seller, and this may be especially true for internet transactions. Buyers were specifically asked about how certain they were that the seller was being honest about the quality of the item they were buying during the selling process. Nearly half (49%) reported being very certain of item's quality while 45% reported being somewhat certain. Only 6% report any level of uncertainty. When we compared this response between those who bought via the internet and those who bought another way, we found no statistical difference between these two groups of buyers.

A big advantage of the internet is that it can reduce sales costs. For example, commissions on sales of used FME items on eBay are often capped at \$250 while commissions in traditional auctions can range from 5 to 15 percent. Sellers were asked about the costs they faced during the sale of their used FME items and their level of satisfaction with the whole selling process. Those items sold at auction sold for an average (median) of \$8,249 (\$2,000) with an average commission of 7.5%. Those items sold via internet auction sold for an average (median) of \$15,249 (\$15,000) with an average commission of 1.6%. The average (median) price of items sold to dealerships was \$15,290 (\$9,000) while the average (median) price of items sold via classified ads was \$21,635 (\$5,000). Items sold via internet classified ads averaged \$13,990 with a median of \$9,500 while items sold by another means (personal connections) sold for an average of \$15,394 with a median of \$4,500.

When asked about how satisfied with the sale of the most recent used FME item they sold, 67% of all farmers said they were very satisfied while only 5% noted any level of dissatisfaction. When satisfaction levels were compared across all types of venues, internet classified ads were rated as providing the greatest satisfaction and this level of satisfaction was

significantly higher than standard auctions and dealers though not statistically higher than internet auctions or traditional classified ads.

This suggests that farmers are finding internet classified ads to be a satisfying way to transact used FME as they report the highest levels of satisfaction among all sales outlets and find that the price obtained is similarly fair to prices received in other venues.

Reponses to this section of the survey provide insight into the recent buying and selling patterns of U.S. farmers and the quality of the experience they have had with their most recent used FME transaction. However, as many farmers had not recently been involved in the used FME market, but may participate in the future, it is important to understand the views and opinions of all famers concerning the different sales venues available in the used FME market. In the next section of the survey, we asked all farmers to respond to a series of questions regardless of their recent activity in the used FME market.

4. Comparing Possible Ways of Transacting Used FME

We asked half of respondents to assume that they were going to buy a used tractor in the next month and the other half to assume they were going to sell a used tractor during the next month and then had them rate their agreement with a series of statements. For each statement they were asked to rate their agreement with the statement for each of the following five venues: dealers, auctions, internet auctions, classified ads and internet classified ads. Then respondents were asked how strongly they would consider each venue for this next hypothetical purchase occasion (seriously consider, might consider, would not seriously consider).

Buyers were asked to rate their agreement with the following three statements: “I would feel confident that the equipment’s quality would be ‘as advertised,’” “I would feel confident that I was getting the best possible price,” and “If I had a problem with the equipment, I could contact the seller.” In general, prospective buyers had the most favorable impressions of dealers and the least favorable impressions of internet auctions. The percent who agreed or strongly agreed with the ‘quality’ and the ‘contacting the seller with problems’ statements was significantly higher for dealers than for any other venue while the dealers ranked second for the ‘best price’ statement behind auctions. In particular 82% of farmers agreed or strongly agreed that dealers would sell items whose quality was ‘as advertised’ and 94% agreed or strongly agreed that they could contact a dealer if they had problems with the item purchased; 43% agreed or strongly agreed they would get the best possible price from dealers. While 50% of farmers agree or strongly agreed they would get the best possible price from auctions, few farmers agreed or strongly agreed that auctions had items with quality that was ‘as advertised’ (28%) or that they could contact the seller if they had a problem (14%). Buyers were more likely to agree or strongly agree that classified ads provided quality that was ‘as advertised’ (33%) and allowed for contacting sellers with problems about the equipment (31%). Both internet venues had the

fewest farmers that agreed with the three statements, though internet classified ads generated more agreement than did internet auctions for each statement.

When then asked which venues they would seriously consider, it is not surprising that dealers received the most ‘would seriously consider’ ratings (73%), followed by auctions (35%), classified ads (30%), internet classified ads (13%) and internet auctions (6%). The internet did show some promise as a possible venue among farmers, however. More than 43% ‘might consider’ an internet classified ad for this next hypothetical tractor purchase while 31% ‘might consider’ an internet auction. However, there is still considerable resistance among buyers as 63% would not seriously consider an internet auction while 44% would not seriously consider an internet classified ad.

Sellers were asked to rate their agreement with the following three statements: “I would get the best possible sale price,” “I would spend little on commissions and other sale-related expenses,” and “I would get paid the amount that was agreed upon.” The percent who agreed or strongly agreed with all three statements was highest for classified ads though, for the ‘paid the amount agreed upon’ statement, both dealers and classified ads generated statistically similar levels of agreement. Farmers were least likely to agree or strongly agree with all three statements for internet auctions, though the level of agreement on the ‘spend little on commissions’ statement was statistically similar to the level agreement generated by regular auctions. Dealers and auctions generated a mixed review by farmers considering this hypothetical sale of a used tractor. Dealers were seen as the most likely to pay the price that was agreed upon and the second best venue with regard to spending little on commissions and other sale-related expenses. However, dealers were seen as the second lowest in terms of paying the ‘best price’ for used FME. Auctions were viewed as the second best venue in terms of generating high sale prices, but were rated as tied for worst in terms of commissions and tied for second lowest in terms of getting paid the amount agreed upon.

When then asked which venues they would seriously consider for this impending hypothetical used tractor sale, it is not surprising that classified ads received the most ‘would seriously consider’ ratings (68%) while internet auctions generated the least serious interest (10%). However, internet classified ads ranked second in serious consideration (35%), which is higher than the serious consideration given to either auctions (29%) or dealers (22%). Internet auctions did show some promise as a possible venue among farmers, however. More than 40% ‘might consider’ an internet auction for this next hypothetical tractor sale. However, there is still considerable resistance among sellers as 50% would not seriously consider an internet auction. More than one-third (36%) would not seriously consider selling to a dealer.

5. Relationships with Local FME Dealerships

Dealerships are clearly an integral part of used FME markets. To better understand how U.S. farmers connect to local FME dealers, we asked about the number of local FME dealerships that the respondent had done business with during the past 5 years and the quality of the relationship the farmer had with the dealership that was most integral to current farming operations.

One fear is that due to fewer, larger farms in certain areas of the country, local dealerships may become scarce and leave certain areas without access to this crucial market access point for FME. However, we find that 95% of farmers reported interacting with at least one local dealer during the past five years. This varied by region with the fewest farmers in the Midwest (4%) and East (5%) reporting having no local dealership interactions within the past 5 years. Significantly more farmers in the South (7%) and West (8%) reported having done no business with local dealerships in the past 5 years. The South (16%) and West (14%) also report a greater frequency of having done business with a single local dealership than the Midwest (11%) and East (10%).

The vast majority of farmers report doing business with two or more local dealerships during the past 5 years with 28% reporting business relations with two dealers, 28% reporting business with three dealers and 26% reporting business with four or more dealers. Regional differences also appear with respect to the percent of farmers having business relations with four or more dealers, with the most appearing in the East (27%) and Midwest (31%) and the least appearing in the South (20%) and West (21%).

U.S. farmers were largely pleased with the repair and parts service provided by the local dealer with whom they have the closest working relationship. Eighty-eight percent agreed or strongly agreed with the statement “This dealer provides me with excellent parts and repair service.” There was regional variation, however, with more farmers in the Midwest (93%) agreeing or strongly agreeing with the statement than farmers in the East (87%), South (85%) or West (81%).

Most U.S. farmers also felt they were treated fairly during purchases and trade-ins by the local dealer with whom they have the closest working relationship. Across all regions 77% of farmers agreed or strongly agreed with the statement “This dealer treats me fairly during purchases, trade-ins and sales.” Similar regional patterns emerge in this aspect of the relationship as well, with more Midwest farmers agreeing or strongly agreeing with the statement (80%) than farmers from the East (77%), South (75%) or West (68%).

Nearly one quarter of farmers felt that the business relationship they have with their closest dealership could be in jeopardy if they shopped around with other dealers to get a better price. We found that 23% of U.S. farmers agreed or strongly agreed with the statement “If I bought equipment from another dealership based solely on getting a better price, I might

jeopardize my relationship with this local dealership.” No statistically significant regional variation was present.

6. Attitudes and Opinions about Auctions and Different Auction Formats

Auctions are another integral part of the used FME marketplace. For the survey focused on buying, we asked farmers why they attend auctions and how much trust they would place in the quality of items sold in various auction formats.

U.S. farmers were most attracted to auctions for reasons of gauging local market conditions and networking with other farmers and community members rather than for reasons of preferring the format as a means of getting better prices or a fairer deal. Specifically, 90% of farmers agreed or strongly agreed with the statement “Attending auctions helps me learn about local market conditions for key farm inputs such as land, livestock and equipment,” while 85% agreed or strongly agreed with “Attending auctions helps me keep in touch with neighbors, friends, other farmers and people in my community.” We also asked about the relative attractiveness of bidding in an auction versus negotiating face to face for price; 50% agreed or strongly agreed with the statement “I would prefer to bid in an auction rather than to negotiate with a dealer or individual seller,” while only 30% agreed or strongly agreed with “I like the thrill of bidding against others in an auction.” A majority viewed auctions as a way to get a good price as 59% agreed or strongly agreed with “With careful research and a solid bidding strategy, I find that auctions allow purchases at prices below fair market value.”

Auction formats are also proliferating with both online auctions such as eBay and Yahoo and regional hybrid auctions like Ritchie Brothers that draw used FME and construction equipment from several states and feature live bidding as well internet bidding. We described four types of auctions: (A) a liquidation auction of a local farmer being held by a local auctioneer; (B) a twice-a-year auction held at a local fairgrounds that is conducted by a well-know out-of-state auctioneer and draws used FME from across the state; (C) a quarterly auction held by a large national auction house that draws used FME from several states; and (D) internet auction of used FME on a site such as eBay or Yahoo.

We then asked farmers if they would trust the quality the items at each if they didn’t have time to personally inspect each item. Farmers clearly trusted the quality of items at the local liquidation auction (auction A) most with 94% saying they would either strongly or somewhat trust the quality of these items. Substantially fewer would strongly or somewhat trust items from auction B (68%) while very few would strongly or somewhat trust the quality of items at the quarterly regional auction (auction C, 16%) or the internet auction (auction D, 10%).

7. Conclusions

These results paint a first picture of U.S. farmers' engagement in used FME markets and suggest that the internet currently plays a minor role in actual transactions within this key asset market. While few buyers and sellers of used FME currently use the internet, there are signs that farmers may be open to exploring the internet as a venue for transacting used FME. For example, those who reported selling via internet feel they received fair market value and those who sold via internet classified ads express the highest level of satisfaction with the selling process across all possible formats of selling. In addition many buyers and sellers report they might consider internet venues for future used FME transaction.

However, in order for the internet to grow as a venue in this market, buyers will have to be convinced that they are receiving fair market value as internet buyers were less likely to report that they received fair market value for their purchase than those who bought in non-internet venues. Furthermore, among sellers, one strong benefit of internet venues is that they often feature low commissions and sales fees. However, potential sellers did not reflect this difference in cost structure in their ratings of different selling formats.

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Table 1. Sample Stratification and Weights

Region	Gross Farm Income (1000s) Categories				
	\$10-49	\$50-99	\$100-499	\$500+	All
East					
# U.S. Farms	65,255	14,165	27,565	14,486	121,465
# Surveys Sent	525	300	300	375	1,500
# Surveys Completed	249	146	153	163	739
Sample Weight	0.68	0.28	0.52	0.26	
Midwest					
# U.S. Farms	145,535	64,921	141,225	55,658	407,339
# Surveys Sent	525	300	300	375	1,500
# Surveys Completed	254	151	127	150	682
Sample Weight	1.66	1.25	3.22	1.08	
South					
# U.S. Farms	134,727	26,723	38,171	26,872	226,492
# Surveys Sent	525	300	300	375	1,500
# Surveys Completed	180	102	100	104	486
Sample Weight	2.17	0.76	1.11	0.75	
West					
# U.S. Farms	55,641	19,247	33,474	19,103	127,465
# Surveys Sent	525	300	300	375	1,500
# Surveys Completed	249	137	135	131	652
Sample Weight	0.65	0.41	0.72	0.42	
U.S.					
# U.S. Farms	401,158	125,056	240,435	116,119	882,768
# Surveys Sent	2,100	1,200	1,200	1,500	6,000
# Surveys Completed	960	536	515	548	2,559

Notes: East: CT, DE, KY, MA, MD, ME, NC, NH, NJ, NY, RI, PA, TN, VA, VT, WV ;
Midwest: IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI; South: AL, AR, FL, GA, LA,
MS, OK, SC, TX; West: AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY.

Table 2. Descriptive Statistics for Weighted Sample

Variable	Mean [95% Confidence Interval]	2007 U.S. Average
Has Internet Access (%)	71.7 [69.5, 73.8]	71.2 ^a
Age < 35 (%)	2.9 [2.3, 3.6]	4.2 ^b
Age 65+	35.9 [34.0, 37.8]	29.9 ^b
Female (%)	5.1 [1.0, 6.1]	8.2 ^a
HS and some College (%)	67.5 [65.6, 69.3]	67.2 ^b
College Education or More (%)	27.7 [25.5, 29.8]	24.5 ^b
White (%)	96.6 [95.8, 97.5]	97.3
Grows Crops (%)	83.3 [81.6, 85.0]	76.4 ^c
Raises Livestock (%)	54.1 [51.7, 56.5]	49.0 ^d

Notes: *a* – average among farms selling more than \$10,000 in sales and government payments from 2007 Census of Agriculture. *b* – 2008 figure from U.S.D.A. Economic Research Service Agricultural Resource Management Survey, Table 4.3. *c* – percent of U.S. farms with cropland from 2007 Census of Agriculture. *d* - percent of farms reporting sales of any animals or animal products in 2007 Census of Agriculture.

Table 3. Non-Response Bias: Analysis by Time of Return

Variable	Returned in < 4 weeks (N=1885)	Returned later (N=674)	<i>p</i>
Transacted used FME in past 5 years (%)	56.5	53.4	0.27
Relative consideration given to internet vs. non-internet venues for future FME transactions	-0.29	-0.30	0.27
Agreement with “My local FME dealer provides excellent parts and repair service”	4.18	4.24	0.17
Agreement with “In general, you can trust people”	2.99	2.98	0.98
Agreement with “I trust strangers I meet for the first time”	1.95	1.91	0.22
Risk tolerance rating	5.59	5.75	0.21

Notes: *p* is the probability that we can reject the null hypothesis that the two figures in that row are statistically indistinguishable. Typical thresholds for statistical significance are *p*-values of 0.10 or 0.05.