

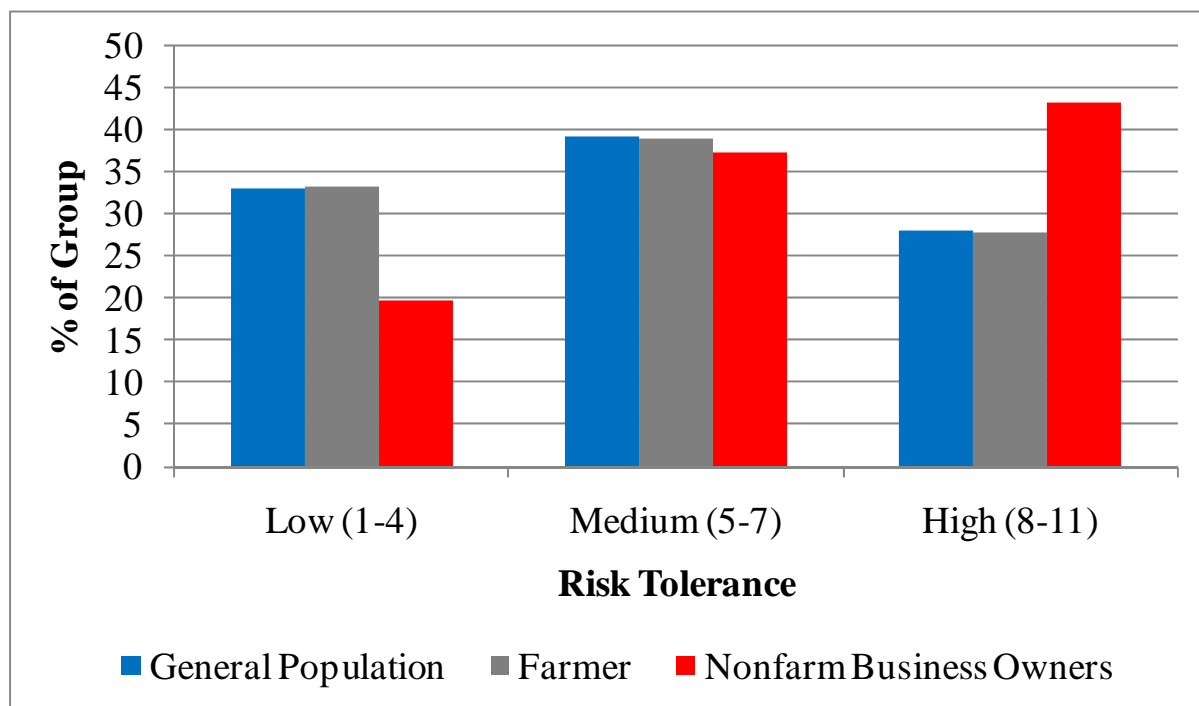
How Well Do Farmers Tolerate Risk? Part 2 – Comparisons to Non-farm Business Owners

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[Last month I asked a simple question](#): does farmers' constant exposure to risk and risky decisions make them better able to tolerate risk than other people? Or has it gone the other way and made farmers more likely to want to avoid future risks?

Using surveys to get a representative sample of the general population and the population of farmers, I asked a simple question to assess a person's willingness to take risks on a 1 to 11 scale, where higher numbers means more willingness to take risk. Here is what I found:



The general population (blue bars) and farmers (gray bars) have nearly identical risk tolerance: about one-third rate themselves in the low category (between 1 and 4); about 40% rate themselves in the middle (between 5 and 7); and about 27% rate themselves highly risk tolerant (8 or above). On the general population survey, I also asked if people owned their own business. Interestingly, when this group is broken out separately on the graph, it is quite obvious that non-farm business owners are more risk tolerant. Only 20% are in the low category while more than 40% are in the high category.

So, what's going on? Why do farmers – who surely face more risk than the general population and similar risk to their non-farm business brethren – turn up as less risk tolerant? To understand, take a quick look another key difference between these three groups: age.

	General Population	Farmers	Non-farm Business Owners
Average Age	46.8	58.0	47.3

Indeed, farmers are much older than the rest of the population. Many researchers have documented a general decline in risk taking behavior as people age.

So, now the interesting question is: what if we adjust for this difference in age? You know, compare across those of a similar age. In fact, I go a couple steps further and use some statistical techniques to adjust not only for age, but for all sorts of differences that crop up between these groups: gender, race, education, income, and even how densely populated and rural their home county is. Once I do this, here's what I find:

	General Population	Farmers	If Farmers 'looked like' the General Population
Average Risk Tolerance Rating	5.57	5.72	6.33

If we make farmers 'look like' the general population, their risk tolerance jumps to 6.33 from 5.72: a 10% jump and now, they are clearly more risk tolerant than the general population.

Here I do the same adjustment and make farmers 'look like' business owners:

	Non-farm Business Owners	Farmers	If Farmers 'looked like' Non-farm Business Owners
Average Risk Tolerance Rating	6.57	5.72	6.79

Here the jump is even bigger: nearly a 19% jump to a risk tolerance rating of 6.79. Now their risk tolerance is even higher than that of non-farm business owners (Statistically speaking, it is not significantly different. In other words, the sample is small enough that the difference could still be chance rather than a true difference).

So, we have an interesting situation. As a population, farmers are not terribly risk tolerant – you can't distinguish them from the general population and they are clearly less risk tolerant than the average non-farm business owner. However, this is largely driven by the fact that farmers are older than the general population and the non-farm business owner population and, with age, comes less willingness to put up with risk.

So, this leads to another interesting question: why is the farm population older than non-farm business owners? Perhaps it is just easier to continue farming into later years than it is to continue running other types of small businesses. Factors such as land ownership, farm

programs, and specialized farm knowledge that might be difficult to transfer to a non-farm job may all work to keep farmers in business longer than non-farm business owners.

Another interesting question: is a better, worse or just different for production agriculture to be run by farmers that are less willing to take risks than their non-farm counterparts? I'd be interested in your thoughts concerning that question.