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Does ‘algorithm aversion’ exist in financial decision-making?

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Do people shy away from using algorithms even when they outperform their human counterparts?

Past research, particularly in the field of psychology, shows algorithm aversion exists, says Christoph Merkle, associate professor of finance at Germany’s Kühne Logistics University.

And, with the financial field seeing an expansion of algorithm use, Merkle and the University of Mannheim’s Maximilian Germann have published a working paper on an whether algorithm aversion exists in financial investing.

The researchers anticipated the results would be different in finance when it comes to algorithm aversion, Merkle says. “It’s a field where there is a vast amount of data and therefore algorithms seem to be in their natural habitat, so to [speak], and so we had a feeling in advance that in finance things might look different.”

With this as a starting point, the researchers conducted an online survey and a laboratory experiment.

They found that while people care about the returns, they don’t care whether they come from a human or an algorithm. “We ran experiments with a relatively simple investment task where there was an intermediary that could either be a human or an algorithm (or a robo), and people had to choose between these two intermediaries.”

The main finding was that algorithm aversion is absent in finance with more people choosing the algorithm. As well, the study found people don’t react differently to errors by the algorithm compared to by a human, says Merkle.

What explains these results?

The survey portion of the study found people think algorithms can generate better investment performance and also have a better ability to learn. That said, participants also saw the value of humans in dealing with outliers. As well, they viewed algorithms as an aid rather than a competitor to human fund managers.

In retirement plans with a menu of options, the question is whether options with algorithms or robo-advisors will be attractive to members, says Merkle. “And that’s where our research contributes, because in the moment we, of course, see some people going for robo-advisors, some people going for this type of investment, but it’s still a very small group of the population.”

Yet, the study’s findings suggested people will accept algorithms as their financial intermediaries.

Merkle does caution these are still early results, noting it’s also important to consider this stage of the study only uses a student population. The researchers are planning to expand on the paper to see if the findings would apply to the broader population, he adds.