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THE PRICE IS NOT RIGHT

ANDREW DETZEL, PHD, ARGUES to get asset pricing right, the cost of doing business cannot be ignored. Anyone who has ever received an employment offer letter knows that the salary stated on paper is not the amount that will show up in their bank account on payday. If they created a budget without factoring in the taxes, retirement contribution and health insurance premiums withheld from each paycheck, they would live in a state of perpetual frustration.

In the world of finance, money managers confront a similar mismatch. Their performance is constantly being compared to benchmark models that project a fair rate of return on financial assets like stocks and bonds. Unfortunately, these models do not consider one key factor that impacts performance in the real world: transaction costs.

"In the academic space, there is a horse race to discover models that explain patterns of return better than any that currently exist," said Detzel, associate professor of Finance and the Mayo McBride Professor. "What we are finding is many rely on incorrect assumptions."

In collaboration with Robert Novy-Marx from the University of Rochester, NBER, and Mihail Velikov from Pennsylvania State University, Detzel recently co-authored "Model Comparison with Transaction Costs," published in *The Journal of Finance*, which points to transaction costs as a missing piece in getting asset prices right.

In asset pricing, risk is always front and center.

"One of the basic premises in my field is the idea that investors who want to see higher rates of return in the long run can only do so by taking on more risk," Detzel said.

Benchmark models predict a fair level of return given a certain level of risk. In addition to risk, they also consider factors like company size, value and profitability. What they fail to do is adequately account for the impact of transaction costs.

Put simply, a transaction cost is the cost of buying or selling an asset. It may take the form of a brokerage fee, tax or bid-ask spread—the difference between the highest price a buyer is willing to pay and the lowest price a seller is willing to accept.

Historically, most asset pricing models have failed to take transaction costs into account. Decades ago, there was good reason for this omission. In the 1970s, traders worked with punch cards, not desktop computers. It would have been prohibitively expensive and time-consuming, if not impossible, to factor transaction costs into their operations.

In 2024, these limitations no longer exist. Technology has evolved and investment practices have become more sophisticated, allowing for the possibility of factoring transaction costs into the mix.

In his recent research article, Detzel compares models that factor in transaction costs to models that ignore them. He finds that the models that factor in transaction costs outperform other models in their ability to accurately predict and explain patterns of return.

Models that consider transaction costs present three major advantages. First, they acknowledge these costs can move asset prices substantially. When a hedge fund manager who manages $100 million places a large order, for example, the markets notice.

They also avoid penalizing money managers unfairly. When someone's performance is judged against a benchmark model that does not factor in real-life costs, they are set up for failure.

Finally, they are more effective at determining if an asset is fairly priced. When transaction costs are omitted from the equation, it may appear that a fairly priced asset is underperforming.

"By taking transaction costs into account, we can align theory with reality," Detzel said. ■

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